NOTE

This Microfiche meets the quality requirements of the American National Standard for Microfiche of Documents (ANSI PH5.9-1975). However, because of imperfections in the document from which it was made, it contains images that are illegible or difficult to read. The source document for this microfiche is the best copy that could be obtained prior to filming.

Congressional Information Service, Inc.
4520 East-West Highway
Bethesda, Maryland 20814

CIS

DRUG ABUSE TREATMENT RESEARCH

HEARING

BEFORE THE

SELECT COMMITTEE ON NARCOTICS ABUSE AND CONTROL HOUSE OF REPRESENTATIVES

ONE HUNDRED FIRST CONGRESS

SECOND SESSION

OCTOBER 10, 1990

Printed for the use of the
Select Committee on Narcotics Abuse and Control

SCNAC-101-2-14

U.S. GOVERNMENT PRINTING OFFICE

37-682 WASHINGTON : 1991

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

H961-18

SELECT COMMITTEE ON NARCOTICS ABUSE AND CONTROL

(101st Congress)

CHARLES B. RANGEL, New York, *Chairman*

JACK BROOKS, Texas
FORTNEY H. (PETE) STARK, California
JAMES H. SCHEUER, New York
CARDISS COLLINS, Illinois
FRANK J. GUARINI, New Jersey
DANTE B. FASCELL, Florida
WALTER E. FAUNTROY, District of Columbia
WILLIAM J. HUGHES, New Jersey
MEL LEVINE, California
SOLOMON P. ORTIZ, Texas
LAWRENCE J. SMITH, Florida
EDOLPHUS "ED" TOWNS, New York
JAMES A. TRAFICANT, JR., Ohio
KWEISI MFUME, Maryland
JOSEPH E. BRENNAN, Maine
NITA M. LOWEY, New York
DONALD M. PAYNE, New Jersey

LAWRENCE COUGHLIN, Pennsylvania
BENJAMIN A. GILMAN, New York
MICHAEL G. OXLEY, Ohio
STAN PARRIS, Virginia
F. JAMES SENSENBRENNER, JR., Wisconsin
ROBERT K. DORNAN, California
TOM LEWIS, Florida
JAMES M. INHOFE, Oklahoma
WALLY HERGER, California
CHRISTOPHER SHAYS, Connecticut
BILL PAXON, New York
BILL GRANT, Florida

COMMITTEE STAFF

EDWARD H. JURITH, *Staff Director*
WILLIAM S. SMITH, *Minority Staff Director*

CONTENTS

	Page
Opening statement of:	
Hon. Charles B. Rangel	1
Hon. Lawrence Coughlin	3
Hon. James H. Scheuer	3
Hon. Walter E. Fauntroy	5
Testimony of:	
Mark V. Nadel, Ph.D., Associate Director, National and Public Health Issues, General Accounting Office, accompanied by Rose Martinez, Ph.D., Assistant Director, GAO; and Judy Guilliams-Tapia, Ph.D., Senior Evaluator	6
Charles R. Schuster, Ph.D., Director, National Institute on Drug Abuse	17
Prepared statement of:	
Hon. Charles B. Rangel	35
Mark V. Nadel	40
Charles R. Schuster, Ph.D.	51

DRUG ABUSE TREATMENT RESEARCH

WEDNESDAY, OCTOBER 10, 1990

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON NARCOTICS ABUSE AND CONTROL,
Washington, DC.

The committee met, pursuant to call, at 10:04 a.m., in room B-352, Rayburn House Office Building, Hon. Charles B. Rangel (chairman of the committee) presiding.

Members present: Representatives Charles B. Rangel; James H. Scheuer; Walter E. Fauntroy; Kweisi Mfume; Donald M. Payne; Lawrence Coughlin; F. James Sensenbrenner, Jr.; James M. Inhofe; and Wally Herger.

Staff present: Edward H. Jurith, staff director; George R. Gilbert, staff counsel; James Alexander, press officer; Jennifer Ann Brophy, professional staff; Robyn Rosenblum, professional staff; William S. Smith, minority staff director; Melanie T. Young, minority professional staff.

OPENING STATEMENT OF CHARLES B. RANGEL, CHAIRMAN

Chairman RANGEL. This hearing will come to order.

Once again, we are calling upon the General Accounting Office, the research arm of the U.S. Congress that we use to assist us in trying to find out what we should and should not be doing legislatively, especially as relates to the problem that our Nation and the world are involved in, drug treatment.

There is a lot of concern that our Nation is concentrating on law enforcement and not enough emphasis is given to treatment. To a large extent, the administration and the Congress have refocused our legislative and administrative efforts to concentrate more on treatment. In areas of high addiction, however, one would not know that because there is a tremendous waiting period for treatment, but still States around the country have enlarged their budgets in order to attempt to deal with this problem.

Today's hearing has nothing to do with that, however. Today's hearing has to do with the relative success of the Congress in refocusing the administration's attention on providing moneys for treatment and not knowing what we are doing with the money in that area. To be more specific, it has been the general feeling of members of this panel as well as Members of Congress that we cannot with any degree of accuracy know which drug treatment programs in our communities, our States, regions or counties are effective and which programs are not effective.

For decades we have been presented with directors of programs whose biggest contributions to the industry have been that they

are exaddicts, and it is the assumption that they have more compassion or more knowledge to assist other people who are treated. One of the questions that a politician dare not ask of a director is, "How many of your people stay off of drugs and for how long?" This shows a lack of sensitivity on the part of the questioner to even dare ask the success of these programs.

Then comes the question, "What is involved besides just detoxification and making someone drug free? What is done to prevent that person from having the same problems they did before they decided to do drugs?" The answer is that we could do a lot more if only we had the resources. Yet seldom have we in Congress seen a plan to give us direction as to what we should be involved in. Are we talking about detoxification and then physical health and then reading and writing and developing skills and allowing that person to leave the program with some degree of understanding that they don't have to redo drugs?

Now I believe, and a lot of us believe, that many of these programs are just there to get addicts off the street, to reduce their habits, to give them some methadone, but have nothing to do with rehabilitation. It is just a holding action. Maybe there is a need for something like that. But if there is, that is not the reason we are authorizing and appropriating money.

So what we did was start talking with State Directors, figuring there are only 50—and now that the distinguished Delegate from the District of Columbia is here—54 directors of the States or the District and the possessions, Guam, the Virgin Islands, and Puerto Rico.

I was really shocked and surprised to find that our State Directors had no direction. They haven't the slightest idea what they are doing, and they don't get any direction from the Federal Government. There are no annual conferences. There is no sharing of information. As a matter of fact, there is very, very little known in the area of treatment, notwithstanding the fact that billions of dollars have been poured into this area.

Knowing that I am usually wrong in making these observations, I asked the General Accounting Office to assist this committee in determining exactly what we are doing in the area of research—what is working, what is not working—and to give us some direction to work as partners with the administration, to see that the Congress just doesn't appropriate money for States but that perhaps we could give more direction as to how that money should be used. God forbid that we should actually get involved with our own Federal program, that perhaps we could, at least in the District of Columbia, have some type of a model so that people from all over the world could come and see what we are trying to do.

So, today we are going to hear from the General Accounting Office as to what their findings are, and then we will also have an opportunity to hear from my dear friend Bud Schuster, who obviously has been researching this for some quarter of a century or longer. He will be sharing with us from the administration's perspective what we know and how it is being sent out.

[The statement of Mr. Rangel appears on p. 35.]

Chairman RANGEL. My distinguished chairman, or vice chairman, Larry Coughlin.

OPENING STATEMENT OF LAWRENCE COUGHLIN

Mr. COUGHLIN. Thank you, Mr. Chairman. I did not realize we are going to hear from our colleague from the Public Works Committee today, Bud Schuster.

Mr. Chairman, these are important hearings——

Chairman RANGEL. His name is Charles, but he would rather not be called that when I am chairing the meeting. [Laughter.]

Mr. COUGHLIN. Mr. Chairman, today's topic is indeed timely and important, in part because drug abuse treatment spending by the Federal Government has increased enormously over the past 2 years, rising from $888 million in fiscal year 1989 to probably $1.5 billion next year. In order for us to justify this kind of spending to our constituents, we must see evidence that such spending is effective.

The funding for NIDA itself has gone up from $85.3 million in fiscal year 1986 to $379 million in fiscal year 1990, which is in itself an extraordinary increase.

Recent trends have shown a significant drop in the so-called casual use of drugs. These trends have also pointed to a rising contempt for drug use by young people. Unfortunately, the news is not so good for the addicted, where the numbers have been resistant to change and remain at very high levels. What this means is that drug treatment is where we should focus our demand side attention for the next few years.

It is important that in the recently passed crime legislation the House did include a provision allowing the Federal Government greater ability to provide for statewide drug treatment plans and greater control over how the funds that we are appropriating at the Federal level will be spent in the treatment area.

The quality of the Federal Government's research effort will be key to determining whether our treatment programs are effective, and I look forward to hearing the testimony of today's witnesses, and thank the witnesses for coming.

Chairman RANGEL. Are there any Members seeking recognition before we hear from the General Accounting Office?

My friend and the distinguished Congressman from the great State of New York, James Scheuer.

OPENING STATEMENT OF JAMES H. SCHEUER

Mr. SCHEUER. I thank you, Mr. Chairman. I welcome the representatives from the GAO here today.

We in Congress rely on you, as an island of sanity apart from the political hurly-burly, to give us good advice on what works and what doesn't work, on what is cost effective and what is less cost effective, and therefore, perhaps, a waste of very scarce, very valuable taxpayer dollars.

I hope to ask you about all of the nonlaw enforcement functions that take place in the entire orbit of drug remediation efforts: treatment, rehabilitation, and education. Where in that mix are our dollars most wisely spent? Should we spend more out of the mix for education? Should education be tied to rehabilitation and treatment? Perhaps you might want to talk about the cost effectiveness of the dollars that we currently spend on Federal law en-

forcement and whether some of those dollars might be more wisely shifted to treatment, rehabilitation and education.

I have been on this committee since its inception, when Mr. Wolf was chairman a decade and a half ago, and every year since then the Drug Enforcement Agency, and before that the Federal Bureau of Narcotics and Dangerous Drugs, used to tell us that we are picking up 5 to 10 percent of the drugs that are coming into this country. That figure has never varied, we are still picking up 5 to 10 percent, maybe less.

If that is so, and if the drug overlords simply shove another 5 or 10 or 15 percent into the pipeline at the other end to make up for the drugs that they know will be picked up as a cost of doing business, then we have to understand that our country, under a democratic government, simply can't control its borders from this very evil product that can be brought in in a thousand ways—in the bodies of respectable-looking middle-class citizens, for example.

The Rand Corp. put out a study about a year ago in which they said there is no form of interdiction that is going to work. They did a very sophisticated study based on computer modeling and they came up with the conclusion that if we doubled or trebled the amount of moneys that we were spending on border interdiction maybe we would increase the percentage of drugs that we pick up by another 5 percent or 10 percent maybe.

So looking at it from the entire spectrum of drug remediation efforts, all the way from crop eradication on the foreign fields of wherever, to interdiction at our borders, two approaches that seem really not to be successful, down to law enforcement at the local neighborhood level, treatment, rehabilitation and drug education, where, taking this entire spectrum of approaches to the drug problem, are our dollars most cost effectively spent?

This, ideally, is what I would like to hear this morning. If you folks don't want to chat about the cost effectiveness of the dollars we spend in interdiction and eradication—I would like to hear you give your judgment if you can, but then maybe there are other folks in the GAO who you may feel could more properly testify on that account. But what I would like ideally is the high professionalism and thoughtfulness that you folks always bring to the matters on which you bear your thoughtful study and tell us where we should be souping up our efforts, as well as where efforts are less cost effective. Where, perhaps, ought we to cut out the funds and transfer them into an area that is more productive and those dollars seem to make more of a difference?

Thank you very much, Mr. Chairman.

Chairman RANGEL. Thank you, Mr. Scheuer.

The distinguished Representative from the District of Columbia. I don't know whether this will be the last official hearing of the Select Narcotics Committee this year. The answer to that is in the hands of Mr. Bennett, the drug policy coordinator. He finds it very difficult to let us know whether or not he will be available before the Congress adjourns. But, in the event that he is not able to be with us, this may indeed be the last official hearing, even though we will have many conferences, and I want to take this opportunity to thank the gentleman from the District of Columbia for his decades of service to his Nation, and indeed the free world, not only in

civil rights and economic development, but certainly as relates to this committee. You have gone beyond your role as a public official in demonstrating your concern for people throughout the world who are afflicted with this terrible disease, to the extent that recently you and your wife brought into your home as your own family a child who was born addicted to drugs.

We don't say good-bye to people like you because wherever there is a job to be done there is no question that you will be working trying to find a solution to it. I just wanted to state for the record the deep appreciation and respect that Members of this committee, Republican and Democrat, have had for the contribution you have made to our Nation.

Mr. SCHEUER. Would my colleague yield?

Chairman RANGEL. I yield to the gentleman.

Mr. SCHEUER. I want to iterate the words of the Chairman. He was speaking for New York County. I am speaking for Bronx, Queens and Nassau, and for the Nation, when I say that our colleague representing the District of Columbia has been an absolute asset to this Congress. He has represented his own constituency with great distinction, and has represented the best interests of our country unerringly, with high judgment, sharp and analytic thinking, and a conviction that what is good for our country must be done even though it may be politically unpopular. He has been an extraordinarily fine Representative for his constituents and for the country, Mr. Chairman. I join you in your expression 100 percent.

Chairman RANGEL. I [illegible] roy.

OPENING STATEMENT OF WALTER E. FAUNTROY

Mr. FAUNTROY. Thank you, Mr. Chairman. I don't know whether you are offering me an opportunity for a parting shot at Mr. Bennett, or my friend Mr. Scheuer a parting shot at supply-side economics as advocated by Ronald Reagan. Both of the above.

Let me say with respect to the first that I have appreciated and greatly benefited from my association with the Members of the Select Committee generally and our chairman in particular. I look forward to "life after politics" which I think will be one in which I continue to support the kind of progressive efforts that you make on this committee to deal with one of the most serious problems confronting our Nation and the world. With respect to the days of judgment that are upon us with respect to supply-side economics, I intend to continue to be supportive of the kind of progressive budget alternatives such as we launched in 1981 as an alternative to these disastrous policies.

That having been said, Mr. Chairman, I want to thank you particularly for this hearing and for the tenacity and commitment on your part that have made this hearing possible. As you know, I represent the District where this, the most serious problem confronting our Nation, reflects itself most acutely. We have the highest drug-driven violence rate in the Nation, the highest infant mortality rate in the Nation, the highest percentage of border babies in the Nation. We have the highest AIDS rate in the Nation. None of these alarming rates can be separated from the problem of just drug trafficking but must also include the need for drug treatment.

I have listened for months to your analysis and staff judgment on the question of drug abuse that we are not doing enough in drug treatment research to come to grips with this enormous problem that we have in demand reduction. I must say that it is with mixed emotions that I greet this hearing. I am happy we are having it, but I am very troubled that the GAO testimony reveals that we really don't have any recently completed national evaluation of treatment programs. That indeed NIDA does not have a strategic planning process to assure that the research is targeted on today's drug abusers; and that, regrettably, treatment practitioners who are out here where the rubber hits the road in terms of seeking to address this problem are not involved in setting the research priorities; and most disturbing, we have an appalling lack of training for drug abuse researchers. These matters require our urgent attention. I am looking forward in the remainder of this Congress and, thereafter, to supporting your efforts tc see to it that this matter is addressed and addressed effectively.

Chairman RANGEL. The Chair welcomes Jim Inhofe from Oklahoma to our hearings, and will now call forward Dr. Mark Nadel, who is the Associate Director of National and Public Health Issues at GAO. With him will be Dr. Rose Martinez, who is the Assistant Director, and Dr. Judy Guilliams-Tapia, who is the Senior Evaluator.

I would say, Dr. Nadel, that we have had for weeks your report, and if you could respond to Congressman Fauntroy, who crystallized the request that we made of you as to how long we have had the problem, how long we have been treating, and what we are doing in researching, or better still, to testify in a way that you feel comfortable, we would appreciate it. Once again, on behalf of the U.S. Congress we thank you for the great contribution you make to our Nation and to us as legislators.

STATEMENT OF MARK V. NADEL, PH.D., ASSOCIATE DIRECTOR, NATIONAL AND PUBLIC HEALTH ISSUES, GENERAL ACCOUNTING OFFICE [GAO], ACCOMPANIED BY ROSE MARTINEZ, PH.D., ASSISTANT DIRECTOR, GAO; AND JUDY GUILLIAMS-TAPIA, PH.D., SENIOR EVALUATOR

Mr. NADEL. Thank you very much, Mr. Chairman, and members of the committee. I am pleased to be here today to discuss our recent report on Federal support for research on drug abuse treatment. I will be discussing three issues: first, the current state of knowledge regarding treatment; second, what has influenced the state of knowledge on drug abuse treatment; and, third, current activities at the National Institute on Drug Abuse [NIDA] which are aimed at developing such knowledge.

Briefly, by way of summary, we found that knowledge about drug abuse is limited in significant ways. This area of knowledge has advanced slowly during the 1980s, while the nature of the problem fundamentally changed. NIDA's relatively low research budget during the first part of that decade accounts in part for this slow progress. The lack of a strategic plan to direct drug abuse research and the lack of emphasis on the training of drug abuse researchers also has slowed progress in understanding how to treat drug abuse.

Before going on to these in somewhat more detail, a little background is helpful. We all know that widespread drug abuse is not a new problem. What is new is how drugs are being used and who is using them. Cocaine and crack are now more widely used than heroin, which previously was the larger problem. The emergence of new drugs such as "ice" and the use of combinations of drugs have confounded attempts at treatment. In recent years many women have become addicted. All of these trends further strain the capabilities of the treatment system, which was designed primarily to treat male heroin addicts, and these problems point out the need for research targeted at the new problems.

NIDA is the key Federal agency responsible for supporting research on drug abuse treatment. Until 1986, NIDA's budget was relatively small. Since then its budget has increased dramatically due to concerns over the growing drug abuse problem and the absence of information on the effectiveness of drug abuse treatment. The Institute's funding grew from about $85 million in fiscal year 1986 to about $380 million in fiscal year 1990.

NIDA-funded research has led to significant advances in knowledge on the behavioral, biomedical, and neurobiological factors involved in drug abuse. These discoveries may eventually lead to the development of new treatments for drug abuse. Despite such advances, however, knowledge applicable to drug abuse treatment is limited. In particular, we found three problems.

First, no large-scale evaluations of drug abuse treatment programs have been completed in recent years. During the 1970s and early 1980s, NIDA funded two broad long-term studies of treatment results: the Drug Abuse Reporting Program, known as DARP, which tracked a sample of clients who were enrolled in treatment from 1969 to 1973, and the Treatment Outcome Prospective Study [TOPS], which tracked clients who were enrolled in treatment from 1979 to 1981.

NIDA also funded a large effort to collect data on the characteristics of treatment programs. The studies were completed in the early 1980s and because of a lack of funding no new studies were initiated. The data collection effort was terminated with the advent of block grants. While the two long-term studies showed that treatment was effective in reducing drug abuse, in reducing criminal activity, and in increasing employment, these may have limited applicability to today's treatment system and drug abusers due to dramatic changes in patterns of drug abuse and treatment.

In addition, treatment evaluations are limited by methodological problems such as the lack of a standard measure of treatment effectiveness. Second, little is known about the effectiveness of certain components of treatment programs, such as ways to prevent relapse. There is also limited knowledge on how to match patients with the most appropriate treatment. this is considered important given major differences among patients and treatments and because better matching could potentially increase effectiveness and efficiency in providing treatment.

Third, although cocaine abuse became a widespread problem during the 1980s, knowledge on how to treat it is in the early stages of development. NIDA's support of extramural research on the development of new treatments places greatest emphasis on

opiate abuse, although cocaine/crack abusers now far outnumber opiate abusers. NIDA only more recently has placed added emphasis on developing therapies for cocaine abuse.

NIDA is taking action in a number of areas to address limitations in knowledge. However, the results of most of these initiatives will not be available for several years.

Gaps in knowledge on drug abuse treatment have not been overcome partly because NIDA has not had a strategic planning process to assure that the research it funds is targeted at the most critical needs. This process is particularly important given substantial increases in NIDA's research budget since fiscal year 1987. As a result of low funding levels for treatment research during most of the 1980s, little new knowledge on treatment services and clients was generated during that decade. This was at a time when the Nation's system of drug abuse treatment as well as patterns of drug abuse were undergoing fundamental change.

With a four-fold increase in NIDA's budget between 1986 and 1990, the Institute now has the opportunity to significantly advance knowledge on treatment. Recognizing a need for overall long-term planning of its research, NIDA did begin in 1989 to design a strategic planning process. However, the Institute has not yet fully implemented this process and has not yet developed a long-term strategic plan for its research program.

Such a plan is particularly important for the drug abuse treatment area, which must address changing patterns of drug use. Planning is also critical for ensuring that the large recent increases in NIDA's budget are allocated in a manner that maximizes the development of knowledge in this area.

However, NIDA's planning of its overall research priorities has not addressed the long-term future direction of NIDA's research program. Its planning has been driven by its annual budget process; that is, much of NIDA's funding is a continuation base determined by past priorities. NIDA officials told us that the setting of new priorities tends to focus on new funds resulting from budget increases. Thus, planning usually takes place on the margin. While NIDA has developed some long-term plans, these are focused on specific areas of research and do not comprehensively address NIDA's overall research priorities across all the areas of its research.

Another issue in setting priorities is the role of practitioners. NIDA has been criticized by representatives of the drug abuse treatment community for not considering the needs of practitioners, those who will ultimately apply the knowledge gained from research, in planning its research agenda. NIDA officials acknowledged to us that they have not systematically involved practitioners in their decisionmaking regarding treatment research priorities.

NIDA has recently taken steps to establish a strategic planning unit and an advisory board in order to help plan the direction of its research for the next 5 years. NIDA officials have told us that this new planning process will include the active participation of members of the treatment practice community. We hope that NIDA will follow through on these initiatives and implement an improved

planning process that will give us more knowledge to improve drug abuse treatment.

Research progress depends not only on funding projects today, but also on nurturing graduate students and new researchers to assure continued progress and the vitality brought by entry level researchers. Therefore, training funds are a necessary part of a comprehensive system of research support.

Funding for training of drug abuse researchers has not kept up with increases in funding for research. This limited funding for training has slowed progress in the development of knowledge on drug abuse treatment. Training is important to maintain an adequate supply of researchers capable of conducting treatment research, particularly in light of the increased availability of treatment funds. For example, the need for qualified clinical researchers has grown as a result of recent increases in funding for the development of pharmacologic therapies.

NIDA recognizes that low funding for training has been a problem and has recently begun to increase this funding. However, neither NIDA nor the Alcohol, Drug Abuse, and Mental Health Administration has information on the current supply of or future need for drug abuse treatment researchers, and this information is needed in order to plan the appropriate amount of funding to be allocated to training.

In summary, although drug abuse has been identified as one of the Nation's leading domestic problems, there are significant gaps in understanding due in part to a lack of strategic planning, previously low levels of funding, and limited funding for the training of researchers. Recent budget increases will not necessarily lead to advances in knowledge on drug abuse treatment unless NIDA takes a more proactive approach to planning its research and training program.

In our report, we make two recommendations, directed toward NIDA, concerning these issues. First, NIDA should implement a strategic planning process and develop a plan that sets forth its long-term overall treatment research objectives. This plan should specify the relative priorities assigned to the different categories of treatment research. It should consider current and anticipated trends of drug abuse and the needs of practitioners from the drug abuse treatment community.

In addition, NIDA should be directed to determine how many researchers are needed to carry out planned research and take appropriate action to ensure their availability.

I should add, Mr. Chairman, that I understand NIDA takes issue with some of the matters discussed here, and we did provide them with an earlier draft of this report in April, and had a close-out meeting with NIDA officials back in April and made several changes where we thought information needed to be updated.

Thank you, Mr. Chairman. That concludes my statement.

Chairman RANGEL. Thank you, Doctor.

[The statement of Mr. Nadel appears on p. 40.]

Chairman RANGEL. Now, just tell us in ordinary language. You talk about the lack of funds available to NIDA in the research area, and I am looking at a chart that was put together I guess by NIDA. In any event, you know, as far back as 1974 they were being

funded at $60 million in research, and then it went up in 1986, and now, of course, we are talking about $250 million a year in research.

When it comes to treatment, we have got a budget now of over $1 billion a year, and every since I have been in Congress there have been Federal dollars involved in treatment.

Now, with the exception of the military, how do you explain how we can continuously appropriate money and not know how it is being used? I mean, when we give the monies to the Governors, aren't some people supposed to respond to those who give the money, to say what is working and what is not working? I am not talking about research with a lot of scientists. It is just, you know—what is the money being used for? In the course of you talking with people, did you feel that there was some direction at all coming from, not necessarily NIDA, but from the Federal Government?

Mr. NADEL. Well, of course, the current report focuses just on the research component, and you are asking also about treatment generally and you raise an excellent point. In fact, we are currently looking at the issue of what I think you are getting at, which is accountability for the spending of funds. We currently have a team out going to the States and asking just that question. We also understand that the Office of Treatment Improvement is also embarked on a similar enterprise.

So it is certainly true that long before now we should have had a much better knowledge of what was going on out there, what the money was being spent for, backed up by research, which would have enabled us to see whether the money was in fact being spent well, whether the approaches being pursued were the right approaches. There has been a real lack of that, but now we are trying to catch up.

Chairman RANGEL. But, if we had a State Director that really wanted to do the best job possible and received millions of dollars a year from the State as well as from the Federal Government, in your research of the current situation did you find that periodically he or she was called to Washington to be given the benefit of the most recent research on addicted babies or cocaine or crack addiction, or something that was found out in Hawaii with "ice" that he should be alerted to? Did you get a general feeling that the State Directors, not the guy running the clinic on the street, felt a tie with where the largest amount of the money is coming from?

Mr. NADEL. I can't speak to whether any individual State Director was called to Washington——

Chairman RANGEL. No. No. I meant a conference.

Mr. NADEL. I understand.

Chairman RANGEL. Not one favorite Director.

Mr. NADEL. Yes; I know.

Chairman RANGEL. But I mean something where when the AMA gets together, I know that we don't fund hospitals or the teaching schools involved too much in drugs, but that they would say, Well, we don't have the answer, Dr. Nadel, but at our next national meeting of State Directors on treatment we expect to be hearing from—we are asking questions about this.

Mr. NADEL. In the past that has been very limited. We understand that there is a conference sponsored by NIDA coming up in January which will address those sorts of issues.

Chairman RANGEL. I thought our committee was having a conference. I hope you are not talking about our conference.

Mr. NADEL. I am sorry.

Chairman RANGEL. Because we were going to have one and invite NIDA.

Mr. NADEL. Perhaps that is the conference to which I am referring. There will be a conference.

Chairman RANGEL. But you haven't seen evidence that this thing has been done, you know, on a periodic basis, on an annual basis, where they look forward to the next knowledgeable conference on what is going on?

Mr. NADEL. No. In fact, this whole issue of technology transfer has been a problem.

Chairman RANGEL. So your testimony is we don't have enough researchers, we haven't gotten involved too much in this, and we haven't really followed through on those people that have gone through treatment to know with any degree of knowledge as to which modalities have been successful. But you do feel that NIDA recognizes this is a serious problem, and with conferences prior to your report and subsequent to your report, you are satisfied that they intend to move in the direction which you have recommended?

Mr. NADEL. I think NIDA has said that they are moving in this direction. I think they recognize the importance. They clearly recognize the importance of technology transfer, of getting the word out to the practitioners, and I think they are—they do appear to be moving in this direction.

Chairman RANGEL. Mr. Coughlin.

Mr. COUGHLIN. Thank you, Mr. Chairman. As you indicated in your testimony, the drug problem has changed from emphasis on male heroin addicts to, say, crack and the increasing number of women who are affected. Has NIDA shifted its emphasis to reflect that as far as you can see, as far as your investigation showed?

Mr. NADEL. Again, NIDA has begun to shift its emphasis. We have criticized them for still having a disproportionate emphasis on heroin use, on opiate use. There are some reasons for that. We are certainly not suggesting that they flip-flop their emphasis overnight. That would be very disruptive to research.

We do feel, however, that as cocaine became the bigger problem throughout the 1980s NIDA was very slow to respond. And that, again, is one of the reasons why you need a strategic planning process. Such a process would have better tracked that shift and would have redirected some of the research. Currently, there is a lot of, for example, pharmacological research on opiate addiction which is at the final stages. You simply couldn't pull funds from that. That also is expensive research as you are nearing final development of new drugs to counter illegal narcotics. So that partly explains why they have this—still have sort of an emphasis on opiates. In fact, the emphasis—the priority still is more on opiates than on cocaine.

Mr. COUGHLIN. Is NIDA in the process of implementing the recommendations that you have made?

Mr. NADEL. They are in the process of implementing a strategic planning process. I think their—well, you will have to ask them, of course. But I think that their vision of a strategic planning process is somewhat more limited than what we had in mind.

Mr. COUGHLIN. Is it possible we have expanded the funding for NIDA too quickly in view of the lack of those plans? Are we wasting money?

Mr. NADEL. I can't say that we are wasting money. I think that anytime you have a large buildup of funds for either a domestic program or for the Defense Department unless there is a plan in place there is a substantial risk that the money is not being spent as effectively as it could be.

Mr. COUGHLIN. Some of the criticisms might be addressed if the Congress passed the treatment legislation that I referred to in my opening statement that the President asked for last year which looks to the development of effectiveness standards and services targeted at women and infants and such. Have you looked at that statewide treatment program language, that proposed law, and do you have any recommendations?

Mr. NADEL. We do not have a position on that bill. As I mentioned to the chairman, we are looking currently at the issue of accountability.

Mr. COUGHLIN. Do you think the States have a role in making improvements in these areas?

Mr. NADEL. The States certainly have a role. Most of the money being spent out there is still State money, so they absolutely have a role. I think all the traditional benefits of federalism still apply here. There are—you know, you can try different approaches with different people, different kinds of infrastructure. So it is crucial that the States maintain an active role.

Mr. COUGHLIN. Thank you, Mr. Chairman.

Chairman RANGEL. Mr. Nadel, forgetting NIDA, on the State level, have you found any States that have done their own research to try to understand better what they are doing with public funds?

Mr. NADEL. Let me turn that question over to one of my colleagues, Dr. Martinez.

Ms. MARTINEZ. Currently, we are in discussions with different States regarding their activities in treatment accountability as well as research. There are some indications that some States are being fairly proactive in développing an information base regarding what is happening in their treatment programs.

Chairman RANGEL. Are there any universities that have provided any direction in terms of research of the addict problem?

Ms. MARTINEZ. Would that be universities with or without Federal funding?

Chairman RANGEL. Either one. Just someone who would say, "We ought to know what we are doing."

I have talked with hundreds of treatment program directors, and all of them have been the most decent human beings and compassionate human beings I ever met, and most of them haven't the slightest idea as to what happens to their patients or clients once they go through treatment. They get excited about the enthusiasm

in which they leave, singing gospel songs and having graduations, but in 1 year or two years they don't really know. What they do know is that most of them return to drugs.

Ms. MARTINEZ. As you may recall in our testimony before your committee on the methadone maintenance treatment programs, one thing that we did outline there was basically the lack of program evaluation at the program level. Programs really do not know how well they are doing, and there again we raised the whole issue of the need for standards.

Chairman RANGEL. Since you are lay people and not experts—since none of us really are—does it make any sense at all if someone comes in addicted that you find out what caused that individual, or what were the tendencies, or what were the factors that caused the person to abuse drugs so that once you find that the person's body is clean of drugs you can repair those conditions that caused him to become dependent on drugs in the first place?

I mean, if a dumb kid dropped out of school, and he can't read, he can't write, he can't fill out an application for a job, and you make him drug free, and then he gets back on the street and he still has no place to stay, and he is rejected by his family, he has been kicked out of school, and he still can't read or write, and the only people that he really knows are the people he knew when he was in the drug culture, it just seems to me that commonsense would dictate that he would go where he feels comfortable.

Have you noticed whether anyone has done anything to say that treatment means that you have to also provide skills for a person to have them avoid the temptation of going back on drugs?

Mr. NADEL. I don't know whether anyone has. Obviously, relapse prevention is a key point, and, as you point out, it is not just within the narrow medical conception of relapse. The entire social structure is a part of it.

In the course of several reports we have done, we have looked at the various treatment centers, and I think the ones that we have been most impressed with are those that offer comprehensive sort of treatment, including rehabilitation.

As you know, a lot of addicts have a lot of trouble just showing up some place on time even when they are off drugs, just showing up, and the basic sort of life skills that are necessary to getting a job and keeping a job, and paying your rent, and all the rest of it. It is very important.

In a report we did recently on drug-exposed infants, we talked about treatment for pregnant women. We pointed out again that the best residential treatment is treatment which provides parenting skills and basic life skills. That is crucial.

Chairman RANGEL. But you don't need a Ph.D. and be a part of NIDA to figure that out, really, do you? I mean, if you found someone going into treatment who was untrained and on drugs, you don't really have to get involved in heavy research to say there should be a training component so that this person does not become involved in drugs again in the weeks or months after completing treatment. I mean that could be a directive to attach Federal dollars to without any expertise.

You know, people live on the street and catch pneumonia, and you cure them of pneumonia, and you try to tell them, "Stay out of the street without clothes on."

Mr. NADEL. Yes.

Chairman RANGEL. Maybe we didn't ask you the right questions, but what should we be doing? If I understand you correctly, you are saying that we are spending billions of dollars for treatment at the local, State, and Federal levels. God knows how much is going out there from the private sector, with the insurance programs. But in all of your research, with all of the people you have working for you, you have yet to find anyone who has come up with the type of report that would suggest where our Nation should be going in terms of the different modalities or treatment for the variety of drug problems that we have.

Mr. NADEL. I think that is essentially correct. What we have come up with in talking to people are the areas of knowledge where there are gaps that we need to fill, and this is reiterated in the recent study by the Institute of Medicine as well as by a recent OTA study which generally pretty much are on track with what we found regarding gaps in knowledge.

Chairman RANGEL. Could you assure this committee that you would go back and enlarge your review of this and send us a list of areas that we should look into? It is not just research, it is not just accountability. I am not asking you to take on additional tasks at this time, but it is embarrassing to be a public official, to see the amount of taxpayers' moneys that have gone into so called treatment programs, and to have been one of the strongest politicians demanding more Federal funds, to then find out that in the private and public sectors we really don't know what we are doing with those dollars.

So if you were the chair, or vice chair, or Member of Congress and wanted to at least point us in the right direction, could you just officially or unofficially send us a list of things that should be looked into, not necessarily by politicians or bureaucrats but by people who are concerned about trying to find some partial solution to this serious problem, because I am amazed how many foreigners come here to find out what we are doing for treatment so that they can do the same thing.

I don't mean to leave this at the steps of NIDA. The Secretary of Health and Human Services is asking for the money. Those who are out there taking the money should want to know, "How can I best use it?"

Mr. Coughlin.

Mr. COUGHLIN. Thank you, Mr. Chairman.

I agree with the chairman in terms of his frustration on this issue. If you take drug abuse education, for example, we can see some of the materials that are being distributed, and we can see some of the ads that are on the air, we can see some reduction in the actual use of drugs. But when we get to treatment, why, there is very little that we have been able to really put our hands on and see or feel in terms of what is being done, what are effective treatment modalities and how successful they are in terms of any measurement.

Thank you, Mr. Chairman.

Chairman RANGEL. Jim Inhofe.

Mr. INHOFE. I just have a couple of follow-up questions.

In our committee, we approach the problem on, I guess, three or four fronts, and there is competition for the Federal dollars. That is the reason I always have a lot of interest in this, to try to figure out in my own mind where I want to put my emphasis just as one member of the committee.

When we are talking about the supply side, that has a sex appeal; we are talking about burning the fields in South America and the interdiction. We talk about that, and then we talk about my preference, and I have a prejudice toward the demand side. I feel that in some local areas, such as my area, we are making great progress.

But then we talk about the treatment, and I get confused, and I think all of us do who are not professionals like you guys are, in just what kind of successes we are having, because when we look at a program, we may be looking at a program involving cocaine as opposed to an opiate recovery program, and they will say, well, we are having an 80-percent success rate. Then we find out that, after a year goes by, they have an 80-percent recidivism rate.

Is there any kind of common ground or measure we could have so that we would have a better idea? I know it would vary from drug to drug as to what period of time a person could be considered a success in the program, but, as one member of this committee, I have a very difficult time determining how successful we are.

Also, when you answer that, I would like you to address this also. I have found out in Oklahoma in some of the programs we have, they say there is quite a difference in the recovery rates between men and women. I would like to know what your finding on that is.

Mr. NADEL. You point out one of the really major methodological problems in this whole area. There is now no standard measure of outcome, you are absolutely right, and this is compounded by a couple of things. One, relapse is almost expected after treatment. It is a chronic, relapsing disease. Maybe we will get to a place where one shot of treatment will do it. That would be wonderful. Right now, we are not there.

Sometimes they will talk about effectiveness in terms of being drug free for 3 months or 6 months. Other times, it will be the number of months or after a certain number of retreatments. So there is no standard measure.

In fact, you may recall that one of our recommendations in the report we did on methadone for this committee back in the spring was that NIDA develop more of a standard measure of outcome, but that is really contentious. The standard we used, looking at the clinics in terms of methadone outcomes, was challenged by some people as being unrealistically stringent. So it's tough.

Mr. INHOFE. I think the rest of the Members have this same problem. Since we are competing for, really, the same dollars, no one is more sensitive to the problem that we have right now than all of us are.

I was attending a town hall meeting where we talked about a program that was working that gets a little bit of Federal funding on the demand side, and they say, "You know, you are pouring all

those dollars down the drain in the other two areas," and then we get it from the areas, too. That is what makes it at least difficult for me, and I think if you could continue in that area of trying to find something where we could say, "This is our success rate now, and with improvement in technology we can anticipate that this is going to improve," something a little more specific, in laymen's terms.

Mr. NADEL. Yes.

Also, I wouldn't want to leave the committee with the impression that we are saying that we don't know anything about treatment, about what works. Some treatment areas are better known than others. Methadone is probably the most studied and the one with the most information. The earlier studies which, very unfortunately, were terminated in the early eighties did show that treatment works. What we don't know is more on the microlevel, what components of treatment are more effective, how you match particular clients with particular types of treatments. So it is not a total black box, but we certainly aren't as far along as we should be.

Chairman RANGEL. With most illnesses, would recidivism be a part of evaluating the success or lack of success of treatment program?

Mr. NADEL. I would think so.

Chairman RANGEL. In your preliminary studies, have you found where incarceration has made any major contribution toward treatment?

Mr. NADEL. We are currently looking at the issue of drug treatment in prisons. If you are asking whether throwing someone in jail is itself a treatment that works, we aren't looking specifically at that issue, although we are looking at what happens to addicts when they do go into Federal prisons as well as a number of State prison systems.

Chairman RANGEL. Based on your broad background and experience, would you believe that reducing poverty and homelessness would have any impact on the number of people that enter the drug culture?

Mr. NADEL. Absolutely, and I think it is safe to say that that is a position of GAO, that part of the drug treatment enterprise has to include addressing the underlying causes of drug abuse. The Comptroller General stated that very clearly in his 1989 report to the Congress, and we feel very strongly that this situation does not exist in a vacuum.

Chairman RANGEL. Would you believe that an investment in education and job skills would be of any assistance to avoid recidivism in this area?

Mr. NADEL. I think investment is exactly the right term, Mr. Chairman, certainly.

Chairman RANGEL. In the course of your study, did you see any direction at all from the Federal Government in terms of reducing poverty, homelessness, and investing in education and job training—anything, like economic growth packages or capital gains tax reduction—anything?

Mr. NADEL. With your leave, Mr. Chairman, I prefer to decline to answer that.

Chairman RANGEL. Mr. Sensenbrenner.

Mr. SENSENBRENNER. No questions, Mr. Chairman.

Chairman RANGEL. That is indeed unfortunate.

Maybe you could find a staffer to look into those questions, as to what our Nation could be doing in putting together a package, if we could afford it, or perhaps whether or not the private sector should be involved in it, or local government, or State government. But you just can't have people dying from a disease and say that we haven't studied it or we don't know how to treat it, but we've got a lot of money, and the more people who get sick, the more money we have got to throw out there.

Now if we can't do the job—and maybe we shouldn't do the job—somebody should be doing it, whether it is our Government-funded universities, or maybe our Governors, or maybe the churches and the synagogues, I don't know, but it just sounds dumb for us to continuously appropriate billions of dollars to treat people when we haven't the slightest idea as to whether they are cured, nor does it appear that we are doing anything to prevent people from becoming diseased.

As far as I am concerned, it has nothing to do with NIDA, it has to do with leadership from the public sector and from the medical sector and from our medical schools. We deserve better—the American people—than what we are getting. It is a lousy job, it is an embarrassment, and I'm shocked and surprised, not at the Congress in doing what we do, because we can always go back home and talk about how much money we appropriated for treatment, and we do it on the eve of every election. But it is shocking to see that those who direct where the money is going can't come back and tell us in the Congress what we should be doing to make certain that the money is being used effectively and, again, what we should be doing to assist people in not having to go on drugs to relieve the pain that they find in life.

You have done an excellent job. I do hope, without an official response, that you might work with staff to assist us in intelligently drafting the questions which I have raised this morning.

Mr. NADEL. We certainly will, Mr. Chairman.

Chairman RANGEL. Thank you.

Mr. COUGHLIN. Thank you very much for your work and for being here.

Mr. NADEL. Thank you.

Chairman RANGEL. Now my friend, Bud Schuster, the director of the National Institute on Drug Abuse, the Alcohol, Drug Abuse, and Mental Health Administration, and the Public Health Service, Department of Health and Human Services.

STATEMENT OF CHARLES R. SCHUSTER, PH.D., DIRECTOR, NATIONAL INSTITUTE ON DRUG ABUSE

Dr. SCHUSTER. With all due deference, Mr. Chairman, my name is Bob Schuster. Bud Schuster is the Congressman from Pennsylvania. My apologies, but to you I'm Bud. I've accepted it a long time ago.

Chairman RANGEL. You certainly have.

Dr. SCHUSTER. I am very pleased to be here this morning to be able to talk about some of the issues and concerns which were

raised in the GAO report. As you know, we did see a preliminary draft of the report in April, but we did not see the final report until it was released on September 20. Therefore, I am very pleased to be able to come here today to discuss many of the issues that were raised.

First of all, I would like to have my total testimony accepted in the record.

Chairman RANGEL. Without objection.

Dr. SCHUSTER. I am going to summarize, because I know that the questions are really the meat of this hearing.

It is obvious that drug addiction is one of the most complex disorders confronting the social, behavioral, and biomedical sciences today. Drug abuse is not a single disorder. Not only do the drugs of choice change, but the profile of the user changes. Drug abuse is a moving target, presenting unique roblems in terms of developing treatment and prevention strategies.

As a consequence of this, there is no single solution. Therefore it is necessary that we develop a variety of treatment and prevention modalities if we are going to be able to reach the various populations who are affected by the different drugs of abuse.

It is true, as the GAO report noted, that NIDA's research budget was limited before 1986. When we say 1986, we are referring to the Anti-Drug Abuse Act of 1986, which did increase NIDA's research budget. However, contracts and grants could not begin until the following year. So we really are talking about activities that began in 1987.

I can assure you, I am as frustrated with those kinds of time lags as anybody in the world. I came from a university into the Federal Government. I now realize that in order to meet existing Federal requirements, it takes a minimum of 9 months to award a contract; it takes 1 year to get a grant from the point of submission of the application to award of funds, to allow the investigator to begin the study. This is a great source of frustration to all of us. However, it is the reality of the current Federal process.

It is also true that during the early 1980's, because of changes in legislation, NIDA's ability to conduct evaluations of publicly funded treatment was severely curtailed. This is because of the fact that in 1981, following passage of the Omnibus Reconciliation Act, funding for drug abuse treatment was provided through a block grant mechanism to the States. It is my understanding that because the States were no longer required to have to send reports to the Federal Government, there was a reduction in the amount of money they received.

Several things happened because of this. The States did not all stop their data collection about treatment evaluation. Some 15 of them continued to do so; and some of them sent this information to us. Unfortunately, they all developed different outcome measures. They even differed in terms of how they classified ethnicity and race. They differed in terms of the description of the treatment modalities. As a consequence, even though some States continued to send us information, it was impossible for us to get the overall picture. Again, that was because there was no longer any Federal mandate concerning the manner in which data would be collected and submitted to us.

Chairman RANGEL. Doctor, on that point, did you find, with the data that had been forwarded to you, that education and the degree of poverty had anything at all to do with the number of people going into drugs, anything like that?

Dr. SCHUSTER. Of course.

Chairman RANGEL. Did you find that education, or lack of it, or job training had anything at all to do with who got on drugs and who got off of drugs?

Dr. SCHUSTER. First of all, our studies have clearly demonstrated that the unemployed have a higher prevalence rate of drug use than those who are employed. Second, numerous studies done by NIDA and its predecessor, NIMH, as far back as in the early 1970's, clearly indicated that success in terms of treatment for drug abuse was, in large measure, dependent upon whether or not individuals who were in treatment were able to find meaningful occupations while in treatment and were able to continue being employed thereafter.

I personally conducted a study while I was at the University of Chicago which quite clearly showed that, if we were able to assist clients to find employment, the outcome was much more likely to be successful than for those for whom we were unable to find employment.

Chairman RANGEL. Where are these studies?

Dr. SCHUSTER. They are published.

Chairman RANGEL. You don't need millions of dollars——

Dr. SCHUSTER. They are published.

Chairman RANGEL. I know, but why is it that the Secretary of Health and Human Services wouldn't wave some report saying that this is what you people should be doing in Washington? Why isn't Bill Bennett screaming that if you people really are serious about this, this is what you should be doing? I don't care whether it comes from NIDA, if NIDA can identify what we should be doing and someone else did the report.

Why is it that we just don't have any blueprint, any direction in which to go, from you?

Dr. SCHUSTER. The research that I am referring to went on in the 1970's and early 1980's. The GAO report, which I do not totally agree with, suggests that perhaps this research is no longer relevant. As a consequence, we are being asked to repeat much of this same research because there is now a different drug—namely, cocaine—that is the predominant drug of abuse, and perhaps there is even a change in the population, because now more women are involved than previously. Mr. Chairman, I believe research has to be an ongoing process.

Chairman RANGEL. You know, "research" is a far more sophisticated word than we have to use, except when we are applying for a grant. I am just saying that, just based on your knowledge, nothing has changed from the seventies to the nineties as to who was on heroin and who is on crack. So you don't need anything to update it or to reject what you found in the seventies. You can walk the street and have people ask, "Are you working? How far did you go in school? Where do you live?" and then come up with something and tell us what we should be doing, one, to prevent people or to try to assist people in not going on drugs, and then, notwithstand-

ing all the chemicals that you are using in these labs, it is very important that you teach these people how to work or to understand what work is.

Now is that research, or is that just——

Dr. SCHUSTER. You mentioned the term, I believe, "cost effectiveness," previously. I think that in order for us to convince the State legislatures, the Federal Congress, and the general public to support the cost of these rehabilitative interventions as part of drug abuse treatment programs, we must demonstrate that they are indeed cost effective. I think that is one of the major functions of an institute like NIDA.

Chairman RANGEL. What do you mean, "cost effective"?

Dr. SCHUSTER. By that I mean that if we are going to increase expenditures to add rehabilitation interventions to drug abuse treatment programs that currently do not have them, we must demonstrate that outcome is, in fact, improved significantly.

Chairman RANGEL. The cost of jailing an addict, the cost of treating an addict, the cost that addicts are having on our hospitals and our emergency rooms, the cost in crime—are you saying that you have to have a study to find out whether curing an addict is cost effective?

Dr. SCHUSTER. No; absolutely not. I am saying that if you are going to add an educational component, if you are going to add job training, if you are going to add psychotherapy for those who are also depressed, if you are going to add family counseling for those who need it, it is important to recognize that those services don't come without a price tag. I think, in order to be able to "sell" the fact that this is the clear way to go, we have to demonstrate that the additional expenses involved in all of those procedures do, in fact, result in a better outcome for that patient.

Chairman RANGEL. Is there any question in your mind as to what the answer is to that?

Dr. SCHUSTER. Well, the GAO report stated that we do not know which components of treatment are essential, which are effective. That is a major portion of the research that is going on.

Chairman RANGEL. I am asking you, without the research, just based on your experience, do you have any doubt in your mind that it would be cost effective as it relates to our Nation?

Dr. SCHUSTER. If I were setting up a drug abuse treatment program today, there is no question that I would not consider setting up a treatment program that did not have all of these services available.

Chairman RANGEL. Well, we are going to have to pick it up from there, because you have to give us direction as to what we should be doing under the present political climate in trying to find an answer that works rather than doing what we have to do politically, and that is appropriating money.

Dr. SCHUSTER. Let me, if I may, respond very quickly to some of the concerns which were expressed in the GAO report.

First of all, I think it is important to recognize that the number of dollars as shown in the totals for the expenditures on opiate research and for cocaine research do not reflect NIDA's priorities. The total dollars are somewhat confusing. We have two budgets.

We have an AIDS budget which is separate from our regular budget.

The AIDS budget, which began in 1987, was largely devoted to IV drug users. At that point in time the preponderance of IV drug users were heroin addicted. As a consequence, the demonstration grants which were begun in 1987 and continue to today were aimed at IV drug users and their sexual partners who, as I say, were primarily opiate users. These demonstration grants are large scale, community interventions.

At the same time, from 1986 to 1987, our budget outlays for cocaine tripled. Today, I can tell you that they have gone up almost sixfold over the course of the last several years. In fact, in our regular research budget, our outlay for cocaine research is $38 million versus $30 million in the area of narcotic research.

It is the contamination or the confounding of the AIDS budget, which is this large ticket item, which makes it appear as if NIDA's budget outlays are predominantly in the area of opiate addiction.

Let me emphasize that we cannot forget about opiate addiction. I believe that you have even stated publicly that there is a concern, because of the increase in the purity and availability of heroin, that this problem will come back again. In fact, it has never really left us. It has been a continuing problem, while other drugs of abuse have tended to wax and wane.

Therefore, I think it is essential to capitalize on the 20 years of research which have now given us such great understanding of the actions of opiates on the brain. New medications have been developed—for example, clonidine, a drug with which we can now detoxify people from heroin in a matter of 2 days, whereas previously it took weeks to do that. Another new medication is buprenorphine, which is a vast improvement over methadone, because it does not result in the same type of withdrawal as other narcotic drugs.

I think we have a lot invested in the area of heroin addiction, and we should continue our research efforts. I know you would agree that it is not a problem that is insignificant.

Further, however, I would say that many of the people who are on heroin are also using cocaine. We recognized the problem of cocaine long ago. In 1984, we sent out a request for proposals for treatment research, for the development of treatment interventions for cocaine addiction. Nobody knew what to do at that time. Research efforts were soon initiated. I think we are making significant advances both in pharmacotherapies and in behavioral therapies devoted to cocaine addiction. It takes time, however.

You have been discussing the fact that there is a need for definitions of success. One of the definitions of success is whether the individual is drug free during treatment and after treatment for a period of time. I would submit to you that research that was begun in 1986–87, is not going to be able to have outcome in terms of whether or not the individual is drug free for the next 5 years until 1992. I don't know of any way to get it more rapidly.

I would say that in the GAO report, when they say that data on treatment modalities for cocaine won't be available for a couple of years, they can't be available if we are going to look at long-term outcome. There is no way that I know of to speed up time. If we

are going to ask how many people are drug free in 1 year, 3 years, and 5 years after treatment, I can't do that in less than 5 years.

The second issue is one of research planning and I share the concern about research planning. I would like to point out, however, that research planning has always gone on at the National Institute on Drug Abuse and give you a little bit of a flavor of the manner in which this occurs.

First of all, you will have to understand that the staff at the National Institute on Drug Abuse is composed of people, many of whom spent significant portions of their professional careers in drug abuse treatment and other drug abuse research facilities. As a consequence, they have a very good appreciation for what is involved in the trenches in the treatment area. Further, they belong to professional organizations where their peers who have stayed in treatment continue to discuss the issues and bring them their ideas in terms of what are the research priorities, what are the needs of the treatment field.

So we have a very highly skilled staff which develops a general plan for their division, of which there are five at NIDA. That includes a plan regarding treatment research. These plans are brought to the Office of the Director where, in conjunction with all the division directors as well as outside consultants, we review them and we determine our priorities.

The statement has been made—and perhaps I am responsible for this when interviewed by GAO—that, to a great extent, our research planning is dependent upon what budget we get the following year. Research planning is not. That was a misstatement, if I said that. Obviously, implementation is. If we don't have the money, we simply can't do it.

So it is the case that we have been indeed fortunate at NIDA in having enjoyed a rapid expansion of our budget from, as was stated, about $85 million to almost $390 million. During that period of time, let me point out, treatment research went from $7 million to $178 million. Whereas the total Institute budget went up approximately fourfold, the treatment research budget went up 24-fold.

I can show you better than 124 grants that are in the treatment area that deal with very practical, day-to-day problems that are faced by those who are the practitioners; issues such as a study by Sharon Hall, in which she looked at giving training to addicts to determine whether or not teaching them how to fill out employment forms resulted in a greater ability for them to actually become employed. There were significant differences, and I can tell you that that procedure has now been adopted in many treatment programs across the country. It is very simple. You say, "Why do you need research for that?" The fact is that you have got to show that it really has an impact, and it did.

[The statement of Dr. Schuster appears on p. 51.]

Chairman RANGEL. I hope I didn't appear to be critical of what you are doing or not doing.

Dr. SCHUSTER. No, no, no.

Chairman RANGEL. The more you explain it, the less I really know what you are doing. Whatever you are doing, I am assuming it is done with the highest possible professional standards.

I guess my question is, whatever you are doing, do you call together the 50 directors that operate substance abuse offices throughout our States to share any of these things that you are doing—filling out application forms or whatever?

Dr. SCHUSTER. Yes.

Chairman RANGEL. Do they know what you are doing?

Dr. SCHUSTER. The answer to that is that we do involve treatment practitioners through a number of organizations. For example, this last week, actually before I knew I was coming here, at a meeting of National Association of State Alcohol and Drug Abuse Directors, I met with the board of directors of the TASC, which is the Treatment Alternatives to Street Crime, so that we could discuss what their research needs are, what we have that is of importance to them. This is an ongoing process all the time.

Chairman RANGEL. Is there anything you could tell us as legislators as to what we should attach to our legislation, these dollars that are pouring out to local and State governments, to make certain that they are reaching whatever you found out in your research?

Dr. SCHUSTER. I think that it is essential that the Federal Government, as is being done through the Office of Treatment Improvement, request better State plans from the States.

Chairman RANGEL. How would we evaluate those? We don't know what a plan is. We have no idea what to tell them to put in them.

Do you have a plan that you could give to us so that we would be able to put in our legislation that this is the broad outlines of the national plan for drug treatment?

Dr. SCHUSTER. I would submit to you that, in conjunction with the Office of Treatment Improvement, which is charged with actually interacting——

Chairman RANGEL. Who is in charge of that?

Dr. SCHUSTER. Dr. Benny Primm is the director of the office.

Chairman RANGEL. He just came on board. Was there an office before Dr. Primm came?

Dr. SCHUSTER. The office was formed in response to the fact that the National Institute on Drug Abuse, since it was no longer dealing directly with the States in terms of the funding of treatment, no longer had the mechanism to be able to directly affect the States.

Chairman RANGEL. You wouldn't have a plan. I mean, if we didn't have Dr. Primm, you would not, just based on your 30 years experience, have a plan that tells Congress that, if you are putting the money out there——

Dr. SCHUSTER. We know what the components of a good treatment program are.

Chairman RANGEL. That is what I'm asking.

Dr. SCHUSTER. We know what the components are, yes.

Chairman RANGEL. Now have you ever shared it with us? I mean, how would I know whether or not my State Director, who—and I don't know whether he knows it or not. But how could I ask him if he is following the Federal standards for a good treatment program with the Federal dollars that are funding these clinics?

Dr. SCHUSTER. I did not say that we have standards; that implies a regulatory mechanism. I can say this: First, through our research we are able to give, in broad outlines, the components that are necessary for effective treatment programs.

Second, we are attempting through our research to make those more and more detailed.

Chairman RANGEL. I get the impression that most of our programs would not have those components which you have not even shared with me.

Dr. SCHUSTER. Well, on the contrary——

Chairman RANGEL. Would you agree?

Dr. SCHUSTER. It is the case, as the IOM report suggests, sir, that the funding per treatment slot did decline about 38 percent over a decade. During that period of time many of the things that those of us who have been in the treatment area feel are essential for effective treatment, many of the things that you have been mentioning, such as job training, educational training where necessary, other types of psychotherapy, family therapy, et cetera, were lost in many of the programs because of the decline in the funds that were available for them.

I think that you will find that now this is recognized by the Office for Treatment Improvement and that there are real attempts to try and remedy the situation.

Chairman RANGEL. Is there anything that we have in legislation or should have in legislation to make certain that programs don't get Federal dollars unless they have some of these or all of these components? It would seem to me that not only is it a waste of dollars but it is really a tragedy to have these clinics operating, allowing family and friends to believe they are providing treatment, when really they have more people than they can adequately service and it is a waste of money and time.

Dr. SCHUSTER. Well, I would say you would have to talk specifically to Dr. Primm about this—that the Office for Treatment Improvement is working on the method in which they will review State plans, and I would defer to him in terms of how that will be done.

Chairman RANGEL. So we should wait for Dr. Primm. I am asking what would you suggest that we do as legislators so that we can make certain that the funds we appropriate for treatment are not a complete waste of money. We are not asking for success. We just want to know, based on your 30 years of experience, what we should ask as a minimum requirement.

Dr. SCHUSTER. We have to start with the fact that we must have, as is being requested, more detailed State treatment plans.

Chairman RANGEL. We don't require that now for the block grant?

Dr. SCHUSTER. They have had State treatment plans, but the amount of information that was provided in them was limited. Now, with the new Office for Treatment improvement, the amount of information that is being requested is much greater, and more discretionary authority is going to be placed there in terms of funding of such State treatment plans if they do not pass muster. That is the most important first step. I think we have to begin there and that is exactly what is going on through the Office for Treatment

Improvement. Dr. Primm, I am certain, would be more than willing to discuss the method which they will be using and what they will be looking for in those State treatment plans.

Chairman RANGEL. Why do I have the impression that every time we leave a meeting over the last 20 years that we are always beginning?

Dr. SCHUSTER. Well, that is an interesting question. I think the answer may be that there has not been consistency. You have to remember that at one time NIDA was evaluating all of the treatment programs that were publicly funded. There were feedback mechanisms so that we had a continuing ongoing evaluation.

There has been a hiatus now for several years. As you have suggested and as the GAO report has suggested, the drug abuse scene has changed somewhat during that period of time. Now we have reinitiated it, as was stated. We now have a study which is called Drug Abuse Treatment Outcome Study [DATOS] which has been implemented. It is in the field. Obviously, it is going to take time for us to get that data.

Let me just very briefly tell you that DATOS is going to be evaluating 20,000 people who enter treatment in five treatment modalities in 50 different programs. This is a random sample drawn from the 7,000 or 8,000 treatment programs; and 5,000 of those people will be followed over a period of five years following their inception of treatment. Now I intend to have that as a continuing, ongoing process. This is not just a one-shot affair. This is going to be continuing.

Further, we are now doing the same thing with adolescent treatment programs. So yes, we are beginning again, but it is because of this hiatus.

Chairman RANGEL. I am going to ask Mr. Coughlin whether he would chair this. I have just been called to a budget reconciliation meeting to see whether or not we can set some plans to avoid sequestration.

I hope my questions did not reflect a lack of courtesy, Dr. Schuster, but rather just one of concern and frustration. I would like to leave on a high note. When will this sample be completed?

Dr. SCHUSTER. We will have data one year after we go into the field. We are currently going into the field and it will be an ongoing process, so it will be 1992.

Chairman RANGEL. Well, it is better to see that something is started. I look forward to having a meeting with you, without the mikes and the committee, where you can tell us informally what we should be doing and not restrict it to formal research.

Thank you, Larry.

Mr. COUGHLIN [presiding]. Thank you, Mr. Chairman. Before I yield to Mr. Payne and Mr. Herger, just let me ask a couple of questions.

You indicated that you know the components of a good treatment plan. Could you outline for us what those components are in your mind?

Dr. SCHUSTER. First of all, it is essential for anyone who is coming into treatment that a full-scale assessment of that individual be done. Now what do I mean by that? We need to know what kind of drugs is this individual addicted to; we need to know what

kinds of other psychiatric problems they may have; we need to know everything about their educational level. In other words, we need an assessment of the individual's weaknesses and strengths. Then a treatment plan for that individual can be drawn up by the counselors and the treatment program director.

If the individual is lacking in educational skills or has no family, that will indicate that there is one direction that we must go in. It is essential that we have a very good evaluation as the first step.

Mr. COUGHLIN. That is one component.

Dr. SCHUSTER. Right. The second component is counseling staff that exists in the treatment facility. Recent research conducted by Dr. John Ball, has clearly indicated that treatment outcome for a given patient depends upon the quality and the training and the dedication of the counselor to whom they are assigned. There is huge variance in terms of that, largely because we have not had appropriate salaries or appropriate standards for the selection of drug abuse counselors.

Mr. COUGHLIN. So counseling is the second component?

Dr. SCHUSTER. Yes; drug abuse counseling.

Third, often in today's climate you need as well as the counselors, professional psychotherapy, because a significant number of the individuals who are coming into drug abuse treatment not only suffer from drug abuse but suffer from major depressive disorders, anxiety disorders, and some schizophrenia, and they have to be treated if we are going to be effective in treating the drug abuse.

Fourth, I think that it is essential that for those who are lacking job skills or educational skills that a treatment program be able to get the individual appropriate training and education.

There is a problem with referral, and this comes from somebody who worked out there in the trenches. If you send someone to a job training program who is also known to be in drug treatment there may be a reluctance on the part of the job training program to accept them. They may say, "We've got lots of people out here who aren't junkies. Why should we take this guy in because the chances of him really being successful are minimal?" There is a prejudice against these clients.

Second, in some instances therapeutic communities do not dare to send their clients out to job training programs because the level of drug use at the job training program is such that their clients will come back having gotten high.

Consequently, we may have to incorporate the job training and skill training into the drug abuse treatment program itself, rather than use referrals, which would seem more efficient but, frankly, has its own set of problems.

Another important issue we have to deal with is the fact that individuals are coming from environments (both physical, and even more importantly, social environments) that are not supportive of recovery. If they return to those environments the chances of relapse are very high. As Mr. Rangel pointed out, if the only people you know in this world are other drug users, and you are frequently with them, the chances of your being able to stay drug free are minimal. It is essential that we involve people either in self-help groups, where they can develop alternatives to a drug using life

style, or help them in other ways to free themselves from their ties to drug users.

Mr. COUGHLIN. I might say that the legislation that the administration requested more than a year ago that I have referred to a couple of times here does contain a whole list of specific requirements for a drug treatment plan by the States.

Let me just follow up. Between 1985 and 1989 the number of hardcore cocaine users has nearly doubled. Can you describe any recent developments in the research area which might give us some hope for successfully treating crack addicts? Have there been any developments? You mentioned improvements in the methadone treatment or different, new drugs for that. Is there any hope in research in the crack area?

Dr. SCHUSTER. Well, let me, first of all, say that there are two aspects to that. Number one, we have a very active new program, called our Medications Development Program, This program involves not just university researchers, but many pharmaceutical companies as well. Research efforts are focused on the development of medications that might be used to help people stop using cocaine or to prevent the intense craving and relapse for those who have stopped using it.

Mr. COUGHLIN. Are there any breakthroughs out there?

Dr. SCHUSTER. Yes, sir, there are several medications which look very promising. Dr. Herbert Kleber, who is now, of course, the Deputy Director at the ONDCP did a study with desipramine, an antidepressant medication, which was shown to significantly decrease the number of people who relapsed to cocaine use.

Second, we have another medication called flupenthixol. The advantage of this medication is that you only have to give it once every 2 weeks. That is, of course, ideal because often getting people to take a medication that simply prevents them from getting high is a problem. I could go on and say there are others.

Perhaps of even greater importance, however, at the present period of time is that some of the relapse prevention strategies which have been adapted from alcoholism are showing efficacy in terms of helping people prevent relapse to cocaine use.

They have a procedure called contingency contracting. This is not effective unless people have something to lose. Dr. Thomas Crowley at the University of Colorado has shown that he can very effectively work with an individual who is addicted to cocaine who is a plumber or is a teacher or a lawyer or a doctor or has some type of position that is significant that they can lose. If he can get them to agree that if they come in with a dirty urine—that is, a urine that contains cocaine or its metabolites—that a letter they have already signed will go to their employer saying I have relapsed to cocaine use. This type of contingency contract can help us stay drug free to a significant degree. Now, tragically, that is not applicable to some of our poor inner-city addicts who have literally nothing to lose.

Mr. COUGHLIN. I have some other questions, but let me yield to Mr. Payne.

Mr. PAYNE. Thank you, Mr. Chairman. I just remember some months ago when I think that the drug czar, Mr. Bennett, was testifying he said if he had money to spend—I am paraphrasing—he

would put it in prisons and more police and so forth. Do you feel that the drug czar does not believe in treatment, or with limited dollars you think that he still holds true to that statement where he is feeling that the treatment dollars were less effectively than used than judges and policemen and jails?

Dr. SCHUSTER. Well, I think, in all fairness, I wouldn't know what his exact position is on that issue right now. I would suggest, however, that the strategy that has come from his office emphasizes the fact that you have got to have a balanced approach, and I would certainly agree with that.

If you have a neighborhood in which drugs are cheap and readily available, prevention programs are going to have a much harder time and treatment programs are going to have a much harder time than in an area where drugs are more expensive and the purity of them is lower. So I think you absolutely have to have a balanced approach.

Let me give you an example. A recent study conducted by Gordon Black indicated that black children reported that they were approached to purchase drugs twice as often as white children. Now that means to me that the probability is greater that one of those times they are going to say yes. Since it is double the opportunity it is going to enhance the fact that in that neighborhood you may find more drug users than in another community where the drug is less available and they are being pushed into purchasing it less. So I think that you have got to have both of these efforts.

Further, it is interesting that the treatment programs I know also prefer, if they can, to get people who are referred by the criminal justice system—if there is teeth in the criminal justice system's armamentarium. What do I mean? Every study that was done that I know of has indicated that the longer people stay in treatment the better the outcome. The greater the probability that the individual is going to remain drug free. One way of keeping people in treatment is, if they are court referred, to have the alternative be, if you don't stay in treatment, then you will go back to the court and be remanded to jail.

Now the problem is that in many areas the addicts know that they can leave treatment, and that the court system and the probationary system is such that it may be weeks or months or years before they are picked up and sent back to jail. Under those circumstances, that type of carrot-and-stick approach does not work. Years ago when we did not have the flooding of the court system and the jails, that type of carrot-and-stick approach did work. I would submit that we have got to go back to that type of thing if we are really going to use treatment in its most effective form.

Mr. PAYNE. I saw some statistics recently at two different hearings and both indicated that the use of illicit drugs in general with young people was on the decline. I don't know where they got their figures from, but since I have no way of getting figures it justs seems to be incongruous to me that this is occurring. What is your opinion on this? Were they only sampling, like they do sometimes in polls, white kids?

Dr. SCHUSTER. Well, there are two major sources of data that indicate there is a decline in the overall drug use in society. First is

our household survey which was conducted in 1985 and again in 1988, and will be conducted yearly from now on. That has clearly shown a decline in the overall use of all drugs of abuse.

Now, I would submit to you, of course, that those individuals who are homeless, those individuals who are in prison, those individuals who are simply out on the street all the time even if they do sleep somewhere and "have a home," would not be included in that sample. So, we have initiated a special study here in the District of Columbia—it is called the Metropolitan Area Drug Study—in which we are specifically going out to find the people who are homeless in the criminal justice system, et cetera, so that we can get a composite picture of all the individuals, not just those who are in a household. It is a tougher survey but that is being done.

The second study that has been done, which I think is of great interest, is the High School Senior Survey. Now, in an effort to get at drop-outs, we are now conducting that in tenth graders as well as twelfth graders. Interestingly enough, amongst black students who reach their senior year of high school, reported drug use is even less than among their white counterparts. But of course, this is not dealing with those who drop out of school earlier.

So both of those systems are flawed in the sense that they don't get at a population that may be those who are heavier drug users. We do have some information about that, if I can just take a second to share it with you.

If you look at the High School Senior Survey and you look at the kids who have missed 1, 2, 3, or 4 days of school, that is, they just haven't shown up, in the past two weeks, the proportion of those who report drug use is much larger. Among those who have been out of school four days, the percentage who report drug use is very high. This indicates to us that those kids, who may be on their way to becoming drop-outs, have higher rates of drug use.

Mr. PAYNE. This is my last question. Since 50 percent of inner-city kids drop out, you can see that it is not uncommon that that number, especially of African-American males who graduate, which is a very small percentage—if 50 percent drop out, you can imagine that 75 percent of that are males. Therefore, as you have indicated, it gives you a skewed or nonvalid conclusion when you conclude; first, there is a drop and, second, that those African-Americans who are still there or graduating, it would certainly not be surprising that there would be less use.

Second, I hope that techniques on trying to do the survey with the out-of-school, out-of-work, homeless young people is more successful than the Bureau of the Census after 10 years took a plan and missed, you know, 25 percent of my city—I don't know about other places—because they were homeless or in prison. You know, you ring a bell and no one comes to the door, so you say no one lives there. So I just have some problem with the manner in which you get an accurate picture when it has been such a dismal failure.

But finally—and those aren't questions, those are statements—the prisons. Is there anything going on, since you have mentioned it—we know that a majority of the incarceration today is due to drug-related crimes. Is there anything that the government might make mandatory since Federal funds, I am sure, are used in prisons—they make everything else, or try to make it mandatory. Why

don't we make it mandatory that there be an aggressive, or at least a drug education program, because in many prisons this is totally nonexistent?

Dr. SCHUSTER. That is correct. Only about 30 percent, if I remember the figure properly, of prison inmates have any form of "drug treatment," and that usually is a lecture, not what we would consider to be treatment.

I am pleased to say that we have a number of "demonstration" programs that are taking place in the prison setting. But it is essential that we realize that those aren't going to work unless there is a very strong linkage to a treatment program the minute that person exits from the prison. Because the prison is not a setting that, although I am told that there are drugs in prisons, it is still not the same free setting that they are going to face on the outside, with all the temptations and all their old friends, et cetera. So it is essential that a linkage be effected between drug treatment programs in the prison and outside, and that is what is being done in this research. That is essential, and I think we will be able to demonstrate that it is effective.

Mr. PAYNE. Thank you.

Mr. COUGHLIN. Thank you very much. One part of the President's program that has really failed in the Congress so far is the program for drug testing in prisons. It has failed largely because the States objected to the potential cost of it. But unless you test you are not going to know who to treat, and that was the first step toward trying to get some sort of a treatment program in prisons.

I would like to follow up for a moment. As you have reflected, we know that a large number of people entering treatment don't do so voluntarily. You have reflected on those who come into treatment through the criminal justice system. Others are maybe cajoled by a family member or are sent by an employer. But if we are going to make progress in the area, we have to find some way to get addicts into the treatment who are not particularly interested in treatment. This is especially true of pregnant women. That is one of the terrible areas of this problem right now.

I know the administration was conducting a review of civil commitment policies. Has there been any progress in that review?

Dr. SCHUSTER. Let me say that Dr. Frank Timms and others who are here actually conducted a review of the information that was available from the civil commitment procedures that existed back in the 1960s and 1970s. This technical review was held about a year and a half ago. The opinion of many people at the time that we conducted this review of civil commitment procedures was that, at least in the State of California, mandatory treatment worked. Nevertheless, mandating people into treatment presented a problem since there were waiting lists to get into treatment even for those who volunteered. So I think that issues of civil commitment had to wait until treatment expansion was effected before it could be really given serious consideration.

There is no question that again, this sort of carrot-and-stick approach with civil commitment can allow us to be much more effective in getting people into treatment and keeping them there.

One other thing I would like to point out is that we recognize the fact that many people are not willing to come in for traditional

treatment. We have had an outreach demonstration program over the past three years, through which we have interviewed over 35,000 IV drug users and their sexual partners out on the street. We have gotten information about them, and about why they are not coming into treatment. Over 40 percent of these people that we have interviewed have never been in treatment despite the fact they have been addicted to drugs for 11 years or longer, on average.

So we recognize we have got to be more aggressive, go out there and try to sell treatment. That is one of the reasons why I wear this button, which says, incidentally, "Treatment works." I think one of the problems is that we have generally had a pessimistic attitude about it which has been discouraging to those people who might consider coming in for it.

Mr. COUGHLIN. This committee held hearings in Florida, of which one of the most shocking aspects was the number of multiple drug addicted births that occur. Certainly where you have situations like that we have got to be able to make the slots available and have some form of mandatory treatment so we don't have those multiple addicted births.

Dr. SCHUSTER. Let me point out, sir, that there are several ways in which NIDA is attempting to remedy the situation. First, we transferred about $9.5 million to HRSA, which controls the primary health care centers in the United States for migrant workers and for those who are poor. We did this so that we could determine whether or not they could effectively start to introduce drug abuse treatment in their primary health care centers where they will see pregnant women. Second, we have a number of initiatives started where we are looking at whether or not we can get more women to come into treatment if we offer them prenatal care and pediatric care after birth; in other words, not just treat the mother for drug abuse, but provide full medical services to them as well. We hope that that will be more enticing for people to come into treatment.

Mr. COUGHLIN. I have just one final question. Just looking out there and what you think is possible given, hopefully, the kind of support that our research has been getting, what level of effectiveness can we eventually expect from our treatment programs? What is realistic? Could we expect to reach a point where 90 percent of the people who enter a program would be cured or is that just an unrealistic thing to conceive of?

Dr. SCHUSTER. I think that we have to realize that people come into treatment programs with the common characteristic of being drug addicted but varying incredibly on other dimensions. Often the yuppie who became involved in cocaine was addicted but still had a job, still had a family, still had things to lose. We can be extremely successful in the treatment of such an individual. On the other hand, as has been pointed out, with individuals who have other psychiatric disorders, who have social difficulties in terms of educational skills, job skills, et cetera, our success rate there is, unfortunately, going to continue to be lower. If you take a 20-year-old or a 25-year-old, it is difficult to go back and get them to effect the lifestyle and to obtain the job skills and educational skills that they should have gotten when they were 7 to 17. It is very difficult to go back.

That is why we have, for example, a major program going on in your city, in Baltimore, which is sponsored by both the National Institute of Mental Health and the National Institute on Drug Abuse in which we are looking at ways in which we can intervene in the first grade with children who show characteristics indicative of the fact that they may have a greater probability of becoming drug users when they are adolescents.

One of the big components is a mastery reading program to ensure that children learn to read in the first grade. Because if they don't the chances of them dropping out, the chances of them becoming both drug abusers, and having depression as well, is enhanced. That is an active ongoing research program involving many, many schools in the city. I think it is going to show that it can be effective in preventing these things.

Mr. COUGHLIN. I thank you, Dr. Schuster. I know that you were up here only a few months ago. We thank you for coming back again today to appear before the committee. It is a frustrating area.

Dr. SCHUSTER. No question about it.

Mr. COUGHLIN. Today's hearings have been very helpful to this member and I think to all the members of the committee. We thank you for being here.

Let me yield to the gentleman from Maryland.

Mr. MFUME. No, I don't have any questions, Mr. Chairman.

Dr. SCHUSTER. If I may make one final comment, sir, about the GAO report. This is said not on behalf of NIDA nor on my own behalf, but on behalf of the dozens of treatment practitioners who are out there who also are drug abuse researchers. I do not like the implication that those who are conducting research live in an ivory tower. I would like you to go with me into the areas where they do treatment 40 to 50 hours a week and then work another 20 to 25 hours a week doing research.

I talked to Dr. Charles O'Brien. Yes, it is true he is a professor of psychiatry at the University of Pennsylvania. I said to him, "When was the last time one of your patients pulled a knife on you?" He said, "Knife, hell. He pulled out a hand grenade."

I recounted this to Dr. Kosten. Again, yes, it sounds like he lives in an ivory tower at Yale University. The fact is, he said, "Well, that can't happen here because we have a metal detector and nobody gets in the door where I work until they go through the metal detector."

These people are out treating hardcore drug addicts with all the problems that are seen by every treatment practitioner in the country. They also do research. Would they become more credible as treatment practitioners if they stopped doing research? I don't think so. But I don't think that we can really differentiate.

So, on their behalf I would say that I don't like the implication that because they are researchers that they live in an ivory tower. Believe me, they don't. They would welcome the committee's coming and seeing where they work at any time.

Mr. COUGHLIN. We appreciate that. I appreciate your testimony and appreciate your service.

Mr. PAYNE. Mr. Chairman, would you just yield for half a second?

Because there is no collection of data—you used to do it before 1981—how can you effectively evaluate the cost of treatment, the method of treatment, since there is no data collected? And secondly, do you intend to do that? And also, for example, on the methadone maintenance programs, how can you tell whether it is standardized? Just briefly.

Dr. SCHUSTER. First of all, we do now have a program called the Methadone Quality Assurance Program, in which we are getting data from a sample of the 700 methadone maintenance treatment programs in the United States, and we are going to use that as the basis for looking at treatment outcome, looking at how effective these programs actually are. We recommend, if that is successful, that it should be done with all treatment programs, not just methadone treatment programs. We would recommend as a research organization that a quality assurance program and quality monitoring should be part of all of treatment programs. We are also doing that through another program called DATOS—Drug Abuse Treatment Outcome Study—in a broad variety of treatment programs, therapeutic communities, drug-free and methadone maintenance, in the 12-step programs, et cetera. So we are in the process of doing that. We only had the money since the 1988 Anti-Drug Abuse Act to begin this study. As I mentioned before, there is no way of looking at long-term outcome of drug treatment without it taking time. If we could speed it up we would.

Mr. MFUME [presiding]. Dr. Schuster, on behalf of the chairman and the other members of the committee, let me thank you for your testimony. I apologize, I was not here to receive it, but I assure you that I will go through it. I want to thank you also for the work that the Institute is doing in Baltimore.

We at this time are going to move to adjourn. I don't know if a motion has been made for members to revise and extend their remarks. But, if not, without objection. There are some remarks that I would like to enter for the record, also.

We thank you for coming. We thank Mr. Nadel also, from GAO.

This hearing stands adjourned. Thank you very much.

[Whereupon, at 12:04 p.m., the committee was adjourned, to reconvene subject to the call of the Chair.]

PREPARED STATEMENTS

OPENING STATEMENT

HEARING ON

DRUG ABUSE TREATMENT RESEARCH

WEDNESDAY, OCTOBER 10, 1990

10:00 AM

GOOD MORNING.

TODAY, WE ARE HERE TO DISCUSS THE RECENT FINDINGS OF A STUDY ON DRUG TREATMENT RESEARCH THAT I REQUESTED FROM THE GENERAL ACCOUNTING OFFICE. THE REPORT CAME BACK WITH SOME DISTURBING CONCLUSIONS, MAINLY THAT THERE ARE SOME SIGNIFICANT GAPS IN OUR KNOWLEDGE OF DRUG ABUSE TREATMENT.

THE PURPOSE IN DOING THIS STUDY WAS TO GET A READ ON THE PROGRESS OUR GOVERNMENT IS MAKING TOWARD EXPANDING DRUG TREATMENT THROUGH THE RESEARCH OF WHAT WORKS AND WHAT DOES NOT WORK. IT IS APPARENT THAT WE STILL DO NOT KNOW WHAT WORKS AND WHAT DOES NOT WORK IN THE AREA OF DRUG TREATMENT.

MY REQUEST TO THE GENERAL ACCOUNTING OFFICE WAS BASICALLY THREEFOLD. NUMBER ONE, I WANTED TO GET AN ASSESSMENT OF WHERE WE WERE CURRENTLY WITH RESPECT TO DRUG ABUSE TREATMENT. WHAT DO WE KNOW AND WHAT DOES IT TELL US? NUMBER TWO, WE ASKED GAO TO TELL US WHAT HAS INFLUENCED CURRENT KNOWLEDGE ON DRUG ABUSE TREATMENT. AND FINALLY, WE ASKED GAO TO DETERMINE FOR US ONGOING ACTIVITIES AND PROGRAMS AT THE NATIONAL INSTITUTE ON DRUG ABUSE THAT ARE HELPING TO IMPROVE OUR KNOWLEDGE OF DRUG ABUSE TREATMENT.

AS ONE WHO IS VERY CONCERNED ABOUT OUR NATION'S WAR ON DRUGS, AND AS ONE WHO IS ESPECIALLY CONCERNED ABOUT THE

AVAILABILITY OF TREATMENT AND ASSISTANCE TO THOSE WHO DESIRE TO RID THEMSELVES OF THESE POISONS, I AWAITED GAO'S RESULTS, HOPING TO HEAR SOME VERY POSITIVE THINGS ABOUT THE DIRECTION WE ARE HEADING.

THE GAO REPORT POINTS OUT THAT RESEARCH ON DRUG ABUSE TREATMENT HAS NOT ADVANCED SIGNIFICANTLY IN THE LAST DECADE. FURTHERMORE, THE GAO REPORTS THAT THERE ARE NO RECENTLY COMPLETED EVALUATIONS OF TREATMENT PROGRAMS. WHAT LITTLE INFORMATION WE DO HAVE, WE ARE TOLD, MAY NOT BE OF ANY VALUE TO THE DRUG ABUSING POPULATION OF TODAY.

THIS STUDY LOOMS AS VERY OMINOUS. HERE WE ARE IN THE THROES OF THE WORST DRUG EPIDEMIC IN OUR NATION'S HISTORY, AND YET, THE PROSPECTS OF OFFERING EFFECTIVE TREATMENT TO AS MANY PEOPLE AS WE POSSIBLY CAN DO NOT LOOK GOOD BECAUSE WE SIMPLY DO NOT KNOW ENOUGH ABOUT IT, AND HAVE NOT MADE SUFFICIENT ATTEMPTS TO EXPAND OUR KNOWLEDGE IN THIS AREA.

ACCORDING TO THE GAO, A MAJOR PROBLEM WITH DRUG ABUSE TREATMENT RESEARCH IS THAT THE NATIONAL INSTITUTE OF DRUG ABUSE HAS NOT PURSUED A STRATEGY THAT WOULD DIRECT RESEARCH FUNDING INTO THE MOST CRITICAL AREAS OF DRUG TREATMENT. FOR EXAMPLE, THE GAO POINTS OUT THAT NIDA'S TREATMENT RESEARCH CONTINUES TO FOCUS ON OPIATE ABUSE WHEN OUR SOCIETY SEEMS TO BE MORE RAVAGED BY COCAINE AND CRACK

ADDICTION. WE STILL DO NOT KNOW WHAT WORKS TO EFFECTIVELY TREAT COCAINE ADDICTION, MUCH LESS ABOUT CRACK.

GAO ALSO TELLS US THAT FUNDING FOR TRAINING DRUG ABUSE RESEARCHERS HAS BEEN BEHIND THE PACE OF THE ACTUAL INCREASES THAT HAVE GONE FOR DRUG ABUSE RESEARCH.

ACCORDING TO GAO, NEITHER NIDA NOR THE ALCOHOL, DRUG ABUSE AND MENTAL HEALTH ADMINISTRATION HAS A HANDLE ON WHAT THE FUTURE NEED FOR DRUG ABUSE RESEARCH TRAINING MIGHT BE.

I HAVE SAID MANY TIMES BEFORE THAT WE HAVE TO HAVE AN OVERALL STRATEGY AND BATTLE PLAN IN PLACE IF WE ARE GOING TO WIN THE WAR ON DRUGS. TODAY WE WILL HEAR FROM MARK NADEL, ASSOCIATE DIRECTOR FOR NATIONAL AND PUBLIC HEALTH ISSUES AT GAO, WHO WILL DISCUSS GAO'S REPORT IN MORE DETAIL. WE WILL ALSO HEAR FROM CHARLES SCHUSTER, THE DIRECTOR OF NIDA, THE FEDERAL GOVERNMENT'S LEAD DRUG ABUSE RESEARCH AGENCY. I HOPE THIS HEARING WILL HELP CLARIFY WHERE WE NEED TO GO AND WHAT WE NEED TO DO TO PLOT A BATTLE PLAN.

PART OF THIS OVERALL STRATEGY INVOLVES KNOWING AS MUCH AS WE CAN ABOUT TREATMENT. INCREASING TREATMENT OPPORTUNITIES IS A WEAPON IN OUR ARSENAL. IF WE WANT TO REDUCE THE DEMAND FOR DRUGS IN THIS COUNTRY, THEN PART OF TELLING PEOPLE "JUST SAY NO" MEANS GIVING THEM SOMETHING TO SAY YES TO. IF WE CANNOT SAY YES TO EFFECTIVE AND ADEQUATE TREATMENT, AND IF

WE DO NOT EVEN HAVE A HANDLE ON WHAT THE STATUS OF TREATMENT IS IN THIS COUNTRY, THEN WE ARE VERY DEFINITELY HURTING OURSELVES IN THE WAR ON DRUGS.

GAO HAS COME UP WITH SOME VERY GOOD RECOMMENDATIONS FOR IMPROVED STRATEGIC PLANNING OF DRUG TREATMENT RESEARCH AND FOR A MORE SYSTEMATIC APPROACH TO THE TRAINING OF RESEARCHERS. WE WANT TO KNOW WHAT THE DEPARTMENT OF HEALTH AND HUMAN SERVICES IS DOING TO IMPLEMENT THESE RECOMMENDATIONS.

AS CHAIRMAN OF THE COMMITTEE, LET ME SAY AGAIN THAT I HOPE WE CAN BEGIN TO WORK TOGETHER TO MOVE FORWARD IN THE QUEST TO ESTABLISH EFFECTIVE TREATMENT THROUGH UP-TO-DATE, IN-DEPTH RESEARCH.

THANK YOU, AND I LOOK FORWARD TO THE TESTIMONY.

United States General Accounting Office

GAO Testimony

For Release
on Delivery
Expected at
10:00 a.m. EDT
Wednesday
October 10, 1990

DRUG ABUSE: Research on Treatment May Not Address Current Needs

Statement of Mark V. Nadel
Associate Director for National
and Public Health Issues

Before the
Select Committee on Narcotics
Abuse and Control
House of Representatives

GAO/T-HRD-90-56

GAO Form 160 (12/87)

DRUG ABUSE TREATMENT RESEARCH

SUMMARY OF GAO TESTIMONY

Although drug abuse is one of our most serious domestic problems, knowledge about drug abuse treatment is limited in significant ways. The National Institute on Drug Abuse (NIDA), the principal federal agency charged with furthering research on drug abuse treatment, has had a four-fold increase in its budget from 1986 to 1990. However, to better assure that such increases will advance knowledge on drug abuse treatment, NIDA needs to take a more proactive approach to planning its research and training programs. GAO's principal findings are:

-- Research knowledge applicable to drug abuse treatment has advanced slowly in the last decade. There are no recently completed national evaluations of treatment programs, and earlier evaluations may have limited applicability to today's population of drug abusers.

-- Gaps in knowledge have not been overcome partly because NIDA has not had a strategic planning process to assure that the research it funds is targeted at the most critical needs. Moreover, research has not been fully relevant to treatment practice because NIDA has not systematically involved treatment practitioners, who will ultimately use the results of treatment research, in its decision-making regarding treatment research priorities.

-- NIDA's relatively low research budget during most of the 1980s also accounts in part for the slow progress on knowledge on how to treat drug abuse during a time when the nation's system of drug abuse treatment as well as patterns of drug abuse were undergoing fundamental changes.

-- Despite recent increases in funding for drug abuse research, funding for training of drug abuse researchers has lagged behind.

GAO has made recommendations for improved strategic planning of research and for a more systematic approach to the training of researchers.

Mr. Chairman and Members of the Committee:

I am pleased to be here today to discuss our recent report[1] on federal support for research on drug abuse treatment. I will be discussing three issues:

-- the current state of knowledge regarding drug abuse treatment,
-- what has influenced the state of knowledge on drug abuse treatment, and
-- current activities at the National Institute on Drug Abuse NIDA aimed at developing such knowledge.

We found that knowledge about drug abuse treatment is limited in significant ways. This area of knowledge advanced slowly during the 1980s, while the nature of the drug abuse problem fundamentally changed. NIDA's relatively low research budget during the first part of that decade accounts in part for this slow progress. The lack of a strategic plan to direct drug abuse research and the lack of emphasis on the training of drug abuse researchers also slowed progress in understanding how to treat drug abuse.

---

[1]Drug Abuse: Research on Treatment May Not Address Current Needs GAO/HRD-90-114 (September 1990).

BACKGROUND

Widespread drug abuse is not a new problem. What is new is how drugs are being used and who is using them. Cocaine and its crystalline form, crack, are now more widely used than heroin, which was previously the larger problem. The emergence of new drugs, such as "ice" (smokable methamphetamine), and the use of combinations of drugs have confounded attempts at treatment. In recent years many women have become addicted. All of these trends further strain the capabilities of the treatment system, which was designed primarily to treat male heroin addicts, and point out the need for research targeted at these new problems.

The National Institute on Drug Abuse, an agency within the Department of Health and Human Services, is the key federal agency responsible for supporting research on drug abuse treatment. Until 1986, NIDA's budget was relatively small. Since then its budget has increased dramatically due to concerns over the growing drug abuse problem and the absence of information on the effectiveness of drug abuse treatment. The Institute's funding grew from about $85 million in fiscal year 1986 to about $380 million in fiscal year 1990.

KNOWLEDGE REGARDING DRUG
ABUSE TREATMENT IS LIMITED

NIDA funded research has led to significant advances in knowledge of the behavioral, biomedical, and neurobiological factors involved in drug abuse. These discoveries may eventually lead to the development of new treatments for drug abuse. Despite such advances, however, knowledge applicable to drug abuse treatment is limited. In particular, we found three problems.

First, no large-scale evaluations of drug abuse treatment programs have been completed in recent years. During the 1970s and early 1980s, NIDA funded two broad long-term studies of treatment results: the Drug Abuse Reporting Program, which tracked a sample of clients who were enrolled in treatment from 1969 to 1973, and the Treatment Outcome Prospective Study, which tracked clients who were enrolled in treatment from 1979 to 1981. NIDA also funded a large effort to collect data on the characteristics of treatment programs. The studies were completed in the early 1980s and because of a lack of funding no new studies were initiated. The data collection effort was terminated with the advent of block grants. While the two long-term studies showed that treatment was effective in reducing drug abuse, reducing criminal activity, and increasing employment, these may have limited applicability to today's treatment system and population of drug abusers due to dramatic changes in patterns of drug use and treatment.

In addition, treatment evaluations are limited by methodological problems such as the lack of a standard measure of treatment effectiveness. Second, little is known about the effectiveness of certain components of treatment programs, such as the use of relapse prevention strategies in aftercare. Relapse prevention is intended to prevent patients from returning to drug abuse by providing them with strategies to ensure that they can maintain a life free of drug dependence. There is also limited knowledge on how to match patients with the most appropriate treatment. This is considered important given major differences among patients and treatments and because better matching could potentially increase effectiveness and efficiency in providing treatment.

Third, although cocaine abuse became a widespread problem during the 1980s, knowledge on how to treat it is in the early stages of development. NIDA's support of extramural research on the development of new treatments places greatest emphasis on opiate abuse, although cocaine/crack abusers now far outnumber opiate abusers. NIDA only more recently has placed added emphasis on developing therapies for cocaine abuse.

NIDA is taking action in a number of areas to address limitations in knowledge. However, the results of most of these initiatives will not be available for several years.

NIDA HAS NOT IMPLEMENTED A
STRATEGIC PLAN FOR ITS RESEARCH

Gaps in knowledge on drug abuse treatment have not been overcome partly because NIDA has not had a strategic planning process to assure that the research it funds is targeted at the most critical needs. This process is particularly important given substantial increases in NIDA's research budget since fiscal year 1987. Up to 1987, NIDA's research budget was smaller than the budgets of any of the research institutes within the National Institutes of Health. As a result of low funding levels for drug abuse treatment research during most of the 1980s, little new knowledge on treatment services and clients was generated during that decade. This was at a time when the nation's system of drug abuse treatment as well as patterns of drug abuse were undergoing fundamental changes.

With a four-fold increase in NIDA's budget between 1986 and 1990, the Institute now has the opportunity to significantly advance knowledge on drug abuse treatment. Recognizing a need for overall, long-term planning of its research, NIDA did begin in 1989 to design a strategic planning process. However, the Institute has not yet fully implemented this process and has not yet developed a long-term strategic plan for its research program.

Such a plan is particularly important for the drug abuse treatment area, which must address changing patterns of drug use. Planning

is also critical for ensuring that the large recent increases in NIDA's budget are allocated in a manner that maximizes the development of knowledge in this area.

However, NIDA's planning of its overall research priorities has not addressed the long-term future direction of NIDA's research program. Its planning has been driven by its annual budget process. That is, much of NIDA's funding is a "continuation base," determined by past priorities. The setting of new priorities tends to focus on new funds resulting from budget increases. Thus, planning usually takes place on the margin. While NIDA has developed some long-term plans, these are focused on specific areas of research and do not comprehensively address NIDA's overall research priorities.

Another issue in setting priorities is the role of practitioners. NIDA has been criticized by representatives of the drug abuse treatment community for not considering the needs of practitioners, those who will ultimately apply the knowledge gained from research, in planning its treatment research agenda. NIDA officials acknowledged to us that they have not systematically involved practitioners in their decision-making regarding treatment research priorities.

NIDA has recently taken steps to establish a strategic planning unit and an advisory board in order to help plan the direction of

its research for the next 5 years. NIDA officials have told us that this new strategic planning process will include the active participation of members of the treatment practice community. We hope that NIDA will follow through on these initiatives and implement an improved planning process that will give us more knowledge to improve drug abuse treatment.

FUNDING FOR RESEARCH TRAINING HAS
NOT KEPT PACE WITH RESEARCH FUNDING

Research progress depends not only on funding projects today, but also on nurturing graduate students and new researchers to assure continued progress and the vitality brought by entry level researchers. Therefore, training funds are a necessary part of a comprehensive system of research support.

Funding for the training of drug abuse researchers has not kept up with increases in funding for drug abuse research. This limited funding for training has slowed progress in the development of knowledge on drug abuse treatment. Training is important to maintain an adequate supply of researchers capable of conducting drug abuse treatment research, particularly in light of the increased availability of research funds. For example, the need for qualified clinical researchers has grown as a result of recent increases in funding for the development of pharmacologic therapies.

NIDA recognizes that low funding for training has been a problem and has recently begun to increase this funding. However, neither NIDA nor the Alcohol, Drug Abuse, and Mental Health Administration, which oversees NIDA, has information on the current supply of and future need for drug abuse treatment researchers. This information is needed in order to plan the appropriate amount of funding to be allocated to research training.

RECOMMENDATIONS

In summary, although drug abuse has been identified as one of the nation's leading domestic priorities, there are significant gaps in understanding the relative effectiveness of existing treatments and in developing new treatments. This lack of knowledge is due in part to the lack of a strategic planning process at NIDA. Other factors include low levels of funding for drug abuse research before fiscal year 1987 and limited funding for the training of researchers. These recent budget increases will not necessarily lead to advances in knowledge on drug abuse treatment unless NIDA takes a more proactive approach to planning its research and training programs.

In our report, we made two recommendations concerning these issues. First, to help ensure that NIDA-supported treatment

research addresses the treatment needs of the drug-abusing population, the Secretary of Health and Human Services should direct NIDA to implement its strategic planning process and develop a plan that sets forth its long-term overall treatment research objectives. This plan should specify the relative priorities assigned to the different categories of treatment research. It should consider current and anticipated trends of drug abuse and the needs of practitioners from the drug abuse treatment community.

In addition, the Secretary should direct ADAMHA or NIDA to determine how many researchers are needed to carry out planned research and take appropriate action to ensure their availability.

- - - -

This concludes my statement, Mr. Chairman. I would be happy to answer any questions you may have.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Alcohol, Drug Abuse, and
Mental Health Administration
Rockville MD 20857

STATEMENT BY

CHARLES R. SCHUSTER, PH.D.

DIRECTOR

NATIONAL INSTITUTE ON DRUG ABUSE

ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH ADMINISTRATION

PUBLIC HEALTH SERVICE

DEPARTMENT OF HEALTH AND HUMAN SERVICES

BEFORE THE

U.S. HOUSE OF REPRESENTATIVES

SELECT COMMITTEE

ON NARCOTICS ABUSE AND CONTROL

10 a.m.

October 10, 1990

Room B-352

Rayburn House Office Building

INTRODUCTION

Mr. Chairman and members of the Committee, I am Dr. Charles Schuster, Director, National Institute on Drug Abuse (NIDA), Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA). As you know, NIDA was not provided the opportunity by the General Accounting Office (GAO) to formally comment on the draft report on "Drug Abuse Research on Treatment" before it was published and released on September 20, 1990. Therefore, I am pleased to present our views on the report and on the current state-of-the-science of treatment research.

GAPS IN KNOWLEDGE ABOUT DRUG ABUSE TREATMENT

Drug addiction represents one of the most serious threats to the public health in America and the development of improved treatments for drug addiction is one of the most difficult problems confronting the social, behavioral, and biomedical sciences today. The building of a research base, however, whether it be to develop treatments for drug abuse, cancer, or heart disease, is, by its very nature, an incremental process. Breakthroughs are the exception, not the norm. Drug abuse is a chronic, relapsing disorder. It is a complex phenomenon touching virtually every aspect of the human condition. Many factors play a role in determining an individual's vulnerability to drug abuse and are involved in the transition from drug abuse to addiction. Complex

interactions of biological, psychological, psychiatric, social, familial, and other environmental factors are involved.

The GAO report notes correctly that NIDA's research budget was small before 1987. While additional funds for research indeed may have led to quicker advances in knowledge of effective treatment strategies, it is important to note that there have been significant advances over the last decade - advances without which the ability to progress at this quicker pace would have been impossible. NIDA's large scale, long-term treatment evaluation studies have demonstrated that treatment is effective in reducing drug use and related behaviors, and also in preventing the spread of the human immunodeficiency virus (HIV) among intravenous drug users. Treatment research, encompassing development both of new pharmacologic and nonpharmacologic treatments, as well as treatment effectiveness research, has been and continues to be one of the top research and programmatic priorities of NIDA.

The GAO report acknowledges that NIDA has undertaken a number of important initiatives in the area of drug abuse treatment. The thrust of the report's criticisms are a matter of timing more than anything else. For example, the GAO report asserts that despite the recent cocaine epidemic, NIDA's treatment research program has given priority to developing therapies for addiction to heroin and other opiates, and that results of studies emphasizing cocaine abuse will not be available for several years. Until the last few

years, heroin was the single drug of most concern, and much of the research resources were naturally devoted to the study of treatment for heroin addiction. With the emergence of other serious drug addiction problems, such as cocaine, significant resources have been dedicated to the study of that problem. In fact, NIDA has responded quickly to treatment research needs and has programs underway to develop new pharmacologic and nonpharmacologic treatments for cocaine addiction, as well as research to determine how cocaine treatment can be encompassed with current treatment facilities including those serving alcohol abusers. These programs represent significant new expansions in NIDA's research and have been made possible by the recent increases in funding as well as new scientific opportunities.

But, it is also important to say that research on opiate addiction will continue to be a high priority. Findings from such research have implications for developing strategies for treating other drug abusing populations. Importantly, the knowledge base regarding heroin addiction has advanced to the point that clinical applications can be quickly developed. Not only would it be counterproductive not to capitalize on knowledge gained from NIDA-supported research in the past, it is also important to note that many cocaine abusers are involved in multiple substance abuse and may in fact be dually dependent on opiates and cocaine. Indeed, some are suggesting that the advent of cocaine is spawning a resurgence in the use of heroin. Clearly, NIDA research programs

should not and will not be refashioned to focus only on the drug of choice of the moment. I would like to point out that NIDA's research efforts are consistent with the National Drug Control Strategy.

Furthermore, because of the critical link between intravenous drug use and transmission of HIV, research on opiate addiction will continue to be important to the Institute's treatment research program. NIDA is supporting research to investigate the effects of improved treatment as a strategy to prevent the spread of AIDS by increasing retention in treatment, reducing illicit drug use and concomitant needle sharing, and reducing behaviors (both drug using and unsafe sexual practices) that increase the risk of transmitting HIV. The most effective way to limit the AIDS and drug abuse connection is to provide drug abuse treatment to those who need it. To that end, NIDA's primary AIDS research focus will continue to be the improvement of current treatments and the development of new ones.

Many of the NIDA-funded studies have yielded important findings relevant to cocaine treatment, although it must be stressed that scientific findings may not be translated immediately into new therapies, but rather form the building blocks for well-conceived interventions. The Treatment Outcome Prospective Study (TOPS), a national treatment evaluation, found that existing treatments produced substantial declines in regular cocaine use regardless of

type of program. This is encouraging. These data are based on an admissions cohort which entered treatment between 1979 and 1981 inclusive; consequently, since smoking cocaine (crack) is a relatively new phenomenon, the improvements were among clients using cocaine by injection or intranasally. Studies of treatment for crack users have been initiated both in small multi-program evaluations as well as in a large national evaluation, the Drug Abuse Treatment Outcome Study (DATOS). Results from clinical trials of pharmacologic treatment for cocaine dependence have begun to appear in the scientific literature and results from other clinical trials will become available in the near future. NIDA researchers have identified the putative central nervous system sites involved in dependence on cocaine and heroin and are studying potential medications which mimic, modulate, or antagonize drug-induced activity in these structures so that craving and drug seeking for cocaine and heroin will be controlled and/or the euphoregenic properties of abused drugs will be eliminated.

The GAO report notes that no national evaluation studies have been completed recently. NIDA recognizes the value of, and has strongly supported, this type of research. I know of no better way to evaluate treatment strategies than to do so in prospective studies, in which individuals who go to treatment are followed after treatment. Unfortunately, these studies take time. NIDA's TOPS study has proven to be just such a valuable effort.

The TOPS study followed individuals who were in treatment from 1979 to 1981. However, analysis of that study, due to the complexity and scale of the project, and the fact that individuals were followed for up to 5 years after treatment, has only recently been completed. The study provided convincing evidence that criminal justice referrals do as well or better than other clients in drug treatment. Criminal justice involvement helped to retain clients in treatment, and drug use and criminal activity decreased substantially during treatment for this group. Many referrals were individuals who had not been previously treated and who were not yet heavily involved in drug abuse. By providing an early interruption of criminal and drug abuse careers, criminal justice referral to treatment produced substantial long-term benefits in reducing both crime and drug abuse among treated offenders. It should be noted that these individuals remained in the community and many stayed off drugs, indicating the long-term effectiveness of treatment in decreasing the vulnerability to social and environmental conditions encouraging return to use. Those individuals who stayed drug free did so during the period of time in which cocaine use increased so dramatically.

In 1988, NIDA initiated planning for DATOS, the effort I mentioned a moment ago in relation to crack cocaine. This is a large-scale prospective effort to evaluate treatment as it is typically delivered to determine current practices, the characteristics of individuals entering treatment, the services available and their

effectiveness, and the short- and long-term outcomes of treatment. DATOS will provide a comprehensive understanding of treatment outcomes for clients entering treatment with varied patterns of drug abuse and levels of psychosocial impairment, and experiencing varied types and durations of treatment. DATOS will investigate what treatment services are provided, how they are delivered to the client, and how they are related to treatment outcomes. Under DATOS, treatment admission and outcome data will be collected from 20,000 individuals coming into five treatment modalities in 50 treatment programs. A sample of 4,500 will be followed after treatment to assess treatment outcomes. DATOS will yield valuable information about the effectiveness of treatment as it presently exists, and will suggest strategies to improve treatment. We have every intention of continuing this kind of study in multiple research groups. For example, a prospective study of adolescent treatment will begin shortly.

Additional smaller scale research studies have been completed over the last few years and have provided significant advances in our understanding of drug addiction and improvements in our ability to both study and treat addiction. The GAO report suggests that treatment evaluations are compromised by methodological problems and that little is known about patient matching. Actually, NIDA studies have supported the development of the Addiction Severity Index which has become a standard research assessment tool, and NIDA is part of an international group developing standardized

diagnostic criteria for drug abuse and drug dependence. New models of treatment are being developed as well which tailor combinations of counseling and psychotherapy with pharmacotherapy, relapse prevention, and self-help activities to better match treatment to individuals with multiple drug abuse problems or those having drug abuse problems and a mental disorder such as depression. For example, cognitive-behavioral, psychoanalytically oriented, and interpersonally focused individual psychotherapy strategies were demonstrated to have efficacy for heroin and cocaine abusing populations. Other studies show that methadone-maintained patients with low level of psychiatric severity do not show any further benefit when given psychotherapy in addition to drug counseling, while patients with a high level of psychiatric severity show significantly greater improvement when provided with psychotherapy in conjunction with methadone and drug counseling.

Significant progress has been made in pharmacotherapeutic treatments for drug abuse as well. For example, clonidine, an antihypertensive agent, was clearly demonstrated to be of value in helping patients rapidly detoxify from opiate addiction. Naltrexone, a drug which completely blocks the effects of heroin and which NIDA hopes will be a new weapon in the battle against narcotic addiction was successfully developed by NIDA and Dupont and approved by the Food and Drug Administration in 1985. It is effective in eliminating heroin use in detoxified addicts by preventing euphoria from and readdiction to intravenous heroin.

Research conducted at NIDA's Addiction Research Center has shown that buprenorphine was both clinically and statistically better than low doses of methadone (20 mg), while higher doses of methadone (60 mg) and buprenorphine were not significantly different. Buprenorphine represents an advance over methadone in that it is much simpler to medically withdraw a patient from this medication than from methadone. Finally, we know that intravenous drug use among addicts declines significantly during methadone treatment and that patients being maintained on methadone have rates of HIV infection substantially (33-55%) lower than addicts not in treatment.

In 1988, with congressional support, NIDA initiated a new treatment research program based on recent advances in our understanding of the brain mechanisms underlying addictive behavior. This recently established Medications Development Program seeks to develop a unique partnership between government, academic, and private sector scientists to develop new pharmacologic approaches to the treatment of drug addiction. A multi-year plan was developed which identified a wide variety of objectives. As a result, the program is operational, a new Division has been established, staff recruited, and a variety of agreements with other Federal agencies and the private sector have been or are in the process of being negotiated. NIDA has designated cocaine and heroin addiction as the top two priority areas for its Medication Development Program. The program is also focussing on novel approaches to drug addiction

treatment and has begun to study unique ways in which drugs of abuse might be selectively blocked from entering the central nervous system or passing through the placenta.

STRATEGIC PLANNING FOR RESEARCH

I agree that a strong and dynamic planning process is essential in assuring rapid and continuous progress in the development of knowledge about drug abuse, and I assure you, Mr. Chairman, that NIDA has such a process. In fact, in 1989, as part of an Institute-wide reorganization, NIDA consolidated its strategic planning by establishing the Office of Policy and External Affairs (OPEA). This year, NIDA initiated efforts to establish the Science Planning and Policy Branch within OPEA. The functions of this branch include development, coordination, and integration of the Institute's research planning activities. In past years, the research program divisions have submitted their research plans to the Office of the Director for review. As the Director of NIDA, I have reviewed those plans in consultation with our division directors and have made funding and other decisions to ensure program balance and adequate focus on new priorities. However, because of the tremendous growth in NIDA's budget, we now need staff who are devoted full-time to the research planning function on an ongoing basis. NIDA will be continuing the development of multi-year research plans in the areas of nonpharmacologic treatment, medications development, maternal and developmental

effects of drug abuse, epidemiology, neurobiology of addiction, and AIDS. Development of these plans will include solicitation of input from researchers, clinicians, and practitioners.

The GAO report says that NIDA plans within the context of the annual budget process. While research plans are certainly used as part of annual budget submissions and budget appropriations place restrictions on program expansion in certain areas, it is inaccurate to imply that NIDA's foresight has been limited to the next fiscal year. NIDA develops multi-year initiatives for research in specific areas and announces them to the research community through Program Announcements and Requests for Proposals. The GAO report states that NIDA has begun to develop long-term nonpharmacologic and pharmacologic treatment research plans, as well as plans for other research programs within NIDA. In fact, such planning is not new in NIDA but has become increasingly formalized, in part, in response to the rapid growth in funding for NIDA and the resultant need for coordinated and thoughtful blueprints for developing and maintaining the critical mass of research support necessary to achieve rapid and significant advances in research knowledge.

It is important to emphasize that development of long-term research plans are extremely difficult in the drug abuse area for a variety of reasons. In addition to the instability of funding, a problem not unique to drug abuse, other problems we face in drug abuse are

not the same as those faced by almost all other categorical health research institutes. Drug abuse is not a single disorder. Not only do the drugs of choice change, but the profile of the user changes. Today we see increasing use among women of childbearing age for example. Drug abuse is a moving target and presents unique problems in terms of long-range planning. Treatments are needed not only for cocaine, but for methamphetamine, for PCP, for LSD, for designer drugs, and so on, as the nature of the public health problem continues to change.

As part of our planning process NIDA periodically sponsors technical reviews to solicit input from leaders in the field. The purpose of a technical review is to assess the current status of knowledge in a given area and to identify gaps in knowledge where further research is needed. In 1989, NIDA sponsored a Technical Review on Improving Drug Abuse Treatment. Its purpose was to examine client, program, and policy issues in drug abuse treatment and to facilitate the development of research-based improvements in treatment technology. Client-related topics covered in the technical review included recruitment/outreach, client-treatment matching, psychiatric co-morbidity, and reducing illicit drug use in methadone treatment. Program issues included improving compliance and retention in drug-free programs, the effective combination of methadone and psychotherapy, and the use of behavioral strategies such as relapse prevention. The third area, policy issues, included topics such as program accountability, the

impact of AIDS on treatment, and overcoming community resistance to drug abuse treatment. More recently, in Summer 1990, NIDA sponsored a Technical Review on Advances in Cocaine Treatment. Research Monographs from these and other such meetings, serve not only as resource documents for NIDA's development of long-term plans for treatment research, but also to disseminate current information on drug abuse treatment to the field.

To identify priorities among NIDA's services research activities, which have expanded seven fold in the past year, and to facilitate information sharing, in February 1989 NIDA established a Services Research Task Force to develop Institute-wide plans for drug abuse services research. Current services research projects include the Methadone Treatment Quality Assurance System, DATOS, cost effectiveness studies of jail-based treatment programs, and analysis of the measures used to assess the quality and cost of drug abuse treatment.

Turning to the issue of NIDA's interaction with the treatment community, I am deeply troubled by the GAO report's criticism that NIDA does not systematically involve treatment practitioners who will ultimately use the results of treatment research. In fact, NIDA has fully engaged the field, both practitioners and researchers, in our planning and programmatic activities. Subsequent to your press release, Mr. Chairman, I was contacted by a number of preeminent clinicians with expertise both in treatment

and research, expressing their surprise and concern that the recent GAO report failed to recognize the long-standing involvement of treatment providers in the planning and development of NIDA programs.

The GAO report seems to imply that treatment researchers do not represent the treatment practitioner community. Many treatment researchers do in fact direct large treatment programs. For example, Dr. Thomas Kosten, Acting Co-Director of the NIDA-funded Yale Substance Abuse Treatment Unit, is responsible for the care of all patients, not just research patients. The program treats over 1,200 patients daily, and evaluates over 120 new patients each month. Research protocols come from direct clinical experience with the problems faced by those patients seeking treatment, as well as by those not seeking treatment who are contacted in outreach efforts. Dr. Kosten is not unique. His program is one of many NIDA-supported programs which involve clinicians who directly provide treatment to drug dependent clients. For example, NIDA-supported investigators include Dr. Sidney Schnoll at the University of Virginia Medical School, who is providing treatment services for drug dependent pregnant women and their offspring in a large clinic. Dr. Lawrence Brown directs a program with five methadone maintenance clinics in New York City and is also principal investigator of a treatment research unit under NIDA grant. Other investigators who are also involved in provision of treatment are numerous, but include such leading experts as Dr.

Mary Jean Kreek (Rockefeller University), Dr. Charles O'Brien (University of Pennsylvania and Philadelphia Veterans Administration Hospital), Dr. James Sorensen (San Francisco General Hospital), and Dr. James F. Maddux (University of Texas Health Science Center at San Antonio). In the same way that the most aggressive treatment advances in cancer, heart disease, and arthritis take place in a variety of centers supported by the National Institutes of Health, NIDA's treatment research units are at the cutting edge of drug abuse treatment.

The Department is using all available avenues to address the multi-faceted problem of addiction. Recognizing the need to focus on the prevention and treatment service needs of those suffering from addictive disorders, the Department established in 1986 the Office for Substance Abuse Prevention (OSAP) and in 1989 the Office for Treatment Improvement (OTI), both as part of ADAMHA. The Office for Treatment Improvement was created specifically as a means of improving treatment and will be a major source of research leads based on treatment improvement projects and information gained from closer Federal oversight and management of the Alcohol, Drug Abuse, and Mental Health Services Block Grant. In turn, NIDA will influence the quality of care by working with OTI, assuring that research findings are translated into practice. Currently, for example, NIDA and OTI are collaborating on a residential treatment research demonstration project, located at St. Elizabeths Hospital in the District of Columbia. The Office for Treatment Improvement

is supporting the service delivery component of this project, while NIDA is supporting the research aspects of the study. As another example, NIDA, along with OTI and OSAP, is sponsoring national conferences on substance abuse as it relates specifically to African-American and Hispanic populations.

Furthermore, I want to emphasize for the Committee that NIDA, since its inception, has maintained a dialogue with the entire treatment community, not only with NIDA-funded researchers. Through technical reviews, contracts, grants, and various advisory and review groups NIDA solicits both services and advice from treatment providers, as well as informs treatment providers of current research findings. The National Institute on Drug Abuse does this also through close ongoing and continuing coordination with such organizations as the Alcohol and Drug Problems Association of North America, the Therapeutic Communities of America, the Northeast Regional Methadone Coalition, the National Association of State Drug and Alcohol Directors, and the American Society for Addiction Medicine. In addition, I personally have encouraged the creation of organizations made up of recovering persons to advocate for expanded and improved drug abuse treatment, as well as to offer their perspective on areas for treatment research.

In a major effort to improve communication between researchers and practitioners, NIDA has initiated a program of technology transfer. The specific goal is to ensure that drug-abuse prevention and

treatment practitioners learn about and adopt new technologies so they become an integral part of established treatment and prevention programs. We are holding a major research technology transfer conference in Washington, D.C., on January 12-15, 1991, to present state-of-the-art findings which are applicable to drug abuse treatment and prevention, workplace and AIDS-prevention and education programs. Skills-building workshops and plenary sessions will give participants, both researchers and practitioners, the opportunity to exchange knowledge and experiences. The National Institute on Drug Abuse also has plans under way to evaluate the effectiveness of this conference in transferring information and to assess the extent to which treatment practices are actually implemented by providers.

FUNDING FOR RESEARCH TRAINING IN RELATION TO RESEARCH

As the GAO report acknowledges, NIDA recognizes the need to commit increased resources to the training of scientists to conduct drug abuse research. The NIDA budget for research training increased from $2.4 million in FY 1989 to $3.9 million in FY 1990. The President's FY 1991 request is nearly $5 million - double that of only two years earlier. Nearly 25 percent ($900,000) of the $3.9 million in FY 1990's research training budget represents the amount I shifted from research funds because of my commitment to research training.

I recently made a decision to centralize planning for the Institute's research training programs in the Science Planning and Policy Branch in OPEA. A comprehensive, coordinated review of the Institute's research training programs will be undertaken and a plan developed to estimate the number, type, and extent of research training which is necessary to feed the pipeline of drug abuse researchers. As the GAO report acknowledges, difficulties have been encountered in attracting physicians to drug abuse clinical research. We have recently established in ADAMHA a Medical Staff Fellowship Program which provides 2-3 years of support for clinical research training. The program enables us to recruit physicians of high quality to develop their clinical skills in a research environment, and to compensate them at a rate comparable to that for similar positions in non-Government academic medical centers. In addition, we are currently discussing possible options for providing additional incentives to attract researchers to this field, perhaps similar to those available to the National Institutes of Health AIDS researchers.

The Alcohol, Drug Abuse, and Mental Health Administration is developing models for estimating the future need for researchers and research training in alcohol, drug abuse, and mental health research. Issues such as proper size of research training programs, needs in various disciplines, balance between predoctoral and postdoctoral training, and the aging of the pool of current researchers are being considered. The approach will involve the

development of a model for estimating needs, collecting data on current needs/supply, estimating future attrition rates, estimating future expansion rates, and estimating future needs for research training.

Good research and research training require consistent, reliable funding with stable growth. The cyclical funding provided over the last 20 years, with bursts of spending as public concern waxes and wanes, is ultimately destructive. Young scientists who cannot obtain research support are forced to turn their talents elsewhere. At the same time, established researchers cannot find the technical assistance and the stimulation provided by new minds that they sorely need to conduct their work. The Federal commitment to drug abuse and other biomedical research must be consistent and dependable.

CONCLUSION

Mr. Chairman, I can assure you that we are seriously considering the findings and recommendations presented in the GAO report. We of course agree that more needs to be done. However, as my testimony today demonstrates, much progress has already been made. In fact, over the past decade, I believe there has been a remarkable array of scientific achievements in the area of drug abuse research. These form the foundation of our knowledge and provide guidance for new endeavors in the upcoming decade. While

we have not seen all the advances we might have hoped for, nonetheless, significant progress has been made in our understanding of what works in treating the complex phenomenon of drug abuse, and in identifying promising areas for future investigation.

We know that while drug treatment programs vary widely in methodology and results, the benefits of treatment far outweigh the costs, especially by reducing criminal activity. We know that positive outcomes for clients are closely tied to their length of stay in treatment. The Anti-Drug Abuse Act of 1988 charged NIDA with the development of new pharmacologic approaches for the treatment of drug abuse. Projects begun at that time are of course still under way, and drug development is a long process. Effective medications may be invaluable in the treatment of specific aspects of drug dependence. Ultimately, however, effective treatment of this chronic, recurring disorder, will almost certainly involve a comprehensive array of counseling, therapy, vocational training, and other services.

I believe that a stable research program will, over time, lead to new knowledge that will make it easier to attract and retain patients in drug abuse treatment programs. An ongoing program of research also creates the conditions that are conducive to attracting and retaining scientists and other professionals into the drug abuse field.

This concludes my formal testimony. I would be happy to answer any questions the Committee may have.

○